Ms. B. J. nr. 600 zrestaurowany przez zakład introligatorski R. Jahody w r. 1927 za 48 zł. Pierwotnie obie okładki drewniane, niepokryte wyklejkami były do połowy urwane.

853

Hic deinde intra tabulam lateraliter cum altitudine poli et declinatio
ne puncti terminalis superius memorati quodque in angulo communi
occurret inventum secundum appelletur postea intra tabulam arca
tam cum complemento quidem inventi secundi et complemento altitudinis
poli quodque in latere curvo descendenti colliges inventum tercium eo
tabulis quod ubi ex invento primo abstuleris cum residuo et comple
mento inventi secundi tabulam lateraliter ingredere quodque reperies
in angulo communi demi ex nonaginta gradibus cum reliquo autem
et quo invento secundi intra tabulam arcuatim arcum quem in latere cur
vo descendenti oblatum illi arcui ecliptice quem in principio huius
operis pro ascensionum propositam tanquam certam elicuisti apponas si
punctus terminalis predictus in dimidia ecliptica ascendenti fuerit aut
ab eodem subtrahe si in reliqua videlicet descendenti extiterit habebis
enim sive per addicionem sive per subtractionem factis rem ipsam hortatur
quem querebas arcum ecliptice opus istud rerum patrum est
quamvis prolixum multo tamen prolixius esse in unico oportet casu ta
bulam novam ascensionum obliquarum componere ut per eam ascen
sioni oblique date arcum ecliptice debitum possemus agnoscere illud
aut adiacentibus operacionem huiusmodi peruire duntaxat regioni
bus quarum latitudines maximam solis declinacionem transcen
dunt in altera cum habitacionibus aliis quibusdam racionalis
opus est quas in presenciarum plenius preterire decrevimus in postea
ro in usum veniant et si veniant a secundo abbreviati nostri vi
ro dicto satisfacient. Si libet videre exemplum predictorum acci
pe tale detur michi ascensio obliqua 232 38 cui quantus ecliptice
arcus respondeat in regione habente latitudinem 48 gradu
s explorandum ipsum ascensioni tanquam recte constitute respon
det quinta et vicesima scorpii gradus cuius finis a sectione autu
mnali distat 44 gradibus qui quidem 44 gradus elevantur
in spera recta cum 42 38 equatoris mitto igitur 44 et 42
38 arcuatim in tabulam invenioque secundum tenorem precepti eius
76 0 quod vero inventum primum quoniam punctus ecliptice clau
dens vicesimum quintum scorpii gradum est in dimidia ecliptice de
scendenti deinde intro lateraliter cum altitudine poli 48 et decli
nacione predicti puncti ecliptice que est 19 3 42 et dico inventum
secundum [illegible] 3 huius inventi secundi complementum est 74 41
47 cum quo et complemento altitudinis poli scilicet 42 intra tabu
lam arcuatim numerus 43 23 37 hec autem occurrentem vocabo
inventum tercium quo dempto ex invento primo relinquitur nume
rus 32 23 quem cum complemento inventi secundi si lateraliter ta
bule immiscero reperiam et assolet 31 18 quem numerum ex no
naginta aufero et restant 46 42 quem residuum numerum cum
quo invento secundo arcuatim tabule ingero reperiam arcum 18
30 cum minuo ex 24 gradibus scorpii et relinquuntur 5 30 eiusdem
signi quibus recte ascensio obliqua proposita respondet Tales est
operacio ad quemcumque punctum signatum in quarta ecliptice au
tumpnali que videlicet ab inicio libre usque ad caput capricorni
protenditur de punctis autem reliquarum trium quartarum
et si paulo aliter agendum est id tamen non nisi in addicionibus
et subtractionibus numerorum quemadmodum precipitur eveni
re solet quamobrem alia nova exemplari supputacione opus
esse non arbitror

6 [illegible] 90 2 [illegible]
6 19 [illegible] 53 [illegible]

a · ltitudinem solis supra orizontem existentis in om
ni regione omni[que] hora perpendere

# Ad serenissimum principem ac terstianissimum pannoniarum regem Mathiam Johannis de Regio monte in tabulas primi mobilis Prefatio:

Audivi saepenumero viros quibus dum seculi nostri carerent iniquitate, vehementer dubitare solitos plurib(us) negerendis rebus humanis conducant litterae monumenta nominentur an morte periculi durior, quibus ubique societas hominum contexitur. Quippe cum miserti conditionem et naturam et humanam variis ac pene assiduis implicari [illegible] mutationibus [illegible] tam brevi etatis intervallo datur intueri. Alienas autem cupiditates ac motus animi [illegible]. Praesertim in viris natu grandioribus quorum qui [illegible] rempublicam [illegible] nec dimittere quis posse, quod et si palam [illegible] ad [illegible] in hominum [illegible] haud [illegible] satis erunt [illegible] monumentorum quo magis ingi commemoratione [illegible] multifaria [illegible] bell. [illegible] seditionibus et [illegible] in genus [illegible]. Cetera vero [illegible] [illegible] [illegible] neque [illegible] fletas, cum mortuus vita dege non minus videbere [illegible] vitae particulam dum libamento [illegible] [illegible] ad [illegible] et sodales [illegible] adeo [illegible] solet [illegible] [illegible] [illegible] [illegible] [illegible] humanam [illegible] habenas [illegible] quo [illegible] omnium legittima et indissolubili cathena sive dei summi arbitrium [illegible] et si [illegible] duo [illegible] [illegible] mira [illegible] mortuorum [illegible] humanorum [illegible] et veterum hortamenta [illegible] [illegible] [illegible] decernit quo [illegible] singula quaeque negocia prudentius absolvant. [illegible] in [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. Iam [illegible] [illegible] ut [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] et [illegible] [illegible] florent a deo [illegible] labasset ut [illegible] quondam [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. Daciam pannonias Dalmatiamque et [illegible] ac ceteras finitimas [illegible] [illegible] [illegible] [illegible] [illegible] de [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] non [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] olim [illegible]

sit ab his expectandum est. quorum immensitatem [illegible] ac nostrum [illegible]
conati sunt, non quidem ut iam [illegible] [illegible] fortunas et corpore
atque inertia nostre etatis mentem reputanti grande mirum quod [illegible]
subrepit. qui [illegible] [illegible] tot opera humanorum que licet studiosi alio
quidem alius [illegible] [illegible] reservanda sint. Tanquam tamen [illegible] [illegible],
[illegible] [illegible] hos quod ad militarem [illegible] caveret, nos ad [illegible]
[illegible] [illegible] sint [illegible] sint [illegible] aut aliquando amplectandas
[illegible] [illegible] colligende [illegible] aut alios quibuscumque advenerat offices
quorum omnium opere laboriosa et ipse [illegible] hanc nostram etatem plurimum esse
nemo dubitat. Itali porro [illegible] [illegible] [illegible] [illegible] quod nunc
commemorare velim neque [illegible] quibuscumque liberalibus studiis [illegible]
nari. [illegible] multa sint. que fluctuabunda et [illegible] caduce [illegible]
damentis, [illegible] [illegible] vocantur [illegible] et si a singularibus
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] describunt
[illegible] capite sectatur [illegible] ostenderes. atque [illegible] ubi presens
[illegible] [illegible] loca [illegible] ultra Disciplinas [illegible] [illegible] summope [illegible]
[illegible] [illegible] [illegible] [illegible] roborat, ad [illegible] et ipse [illegible]
[illegible] [illegible] [illegible], quibusque [illegible] ingenium. [illegible] aliquid [illegible]
addere queat. quas neque vetustas [illegible] neque [illegible] [illegible]
[illegible] quoquam [illegible] detorquere possit. Ille namque. [illegible]
[illegible] suos memorie. [illegible] quod ipse sempiterne et immutabiles [illegible]
[illegible] si quid in his paulo infirmius passim obiicit. [illegible] quidam
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible]. quorum utrumque [illegible] [illegible] in [illegible] disciplinis [illegible] in
ea maxime que ad celestia spectacula. [illegible] [illegible] habitis [illegible].
[illegible] iubet attollere vultus. que et si [illegible] antiquissimis maiorum [illegible]
[illegible] [illegible] nata sit, per Claudium Ptholomeum [illegible]
[illegible] [illegible]. et [illegible] [illegible] [illegible] peculiare [illegible] fuit. [illegible]
[illegible] [illegible] ipse [illegible] abstrusa, [illegible] [illegible], et falso [illegible]
posuerit [illegible]. [illegible] mortalibus negare fronte audet. tanquam [illegible]
et nunquam [illegible] dignus [illegible], [illegible] [illegible] in mentem inspirari [illegible]
ut [illegible] [illegible] [illegible] [illegible] [illegible] quo ad possibile est etiam
[illegible] [illegible] queat. Itaque [illegible] maior [illegible] in [illegible] [illegible]
celestium observacionibus et ad [illegible] [illegible] collacionibus geometr[illegible]

Ut assolet intuitu glorie rei efferende videbatur quam grande inspectionem
et per pluribus annis nostros collegerim, nostrorumque plures quam negotii par-
tium est adimplende sit, que profundis ad veritatis usque medullas pe-
netrare. Interea ab incepto dicto dure gravius respondit calamum fregi
ob festi hunc abacum astronomicum supremo celorum atque [illegible] astrono-
mice grandis coegi. opus perfecto immobili per certa ratiocinia dici potest ac cla-
rius quam geometrico iure mobili et inviolabili munita fundatur in annis
[illegible] et per res eorumque variabiles supponantur [illegible] in illius perpetuo scri-
natur et magnas desertum adeo ut si post mille et nonnulla plura annorum
secula separandum fore non animadvertas quia nunc est excipi posset. Ceterum
in cuius rei [illegible] spem huius mathematicorum non eloquentia
spectandum [illegible] quam res ipsa [illegible] capax et non dormitor pronus
et coherens undique sensus [illegible] [illegible] et [illegible] atque [illegible] compleri
[illegible] dignissimam [illegible]. Cum vero tam illustri [illegible] has urbe
[illegible] munere donari decent [illegible] [illegible] [illegible] nemini
[illegible] reparator non [illegible] rectius atque protector [illegible] ambiguum
arbitror [illegible] utrique officium [illegible] religioni assidua atque libera-
lissima [illegible] sedulo impendis. [illegible] exemplo [illegible] nobilium
[illegible] [illegible] hostes quoad vita comes erit fortissime ac salu-
berrime [illegible]. [illegible] mira [illegible] modo que nunc dignissime [illegible]
[illegible] adeptum et [illegible] demonstrant. [illegible]
nis haud [illegible] [illegible] rebelles ac [illegible] apertos [illegible]
[illegible] eo usque [illegible] quo tempore fidelium inimicos
domitare ac [illegible] constringe [illegible]. Tibi [illegible] [illegible]
fundatori hoc [illegible] illas [illegible] astronomice [illegible]
[illegible] [illegible] [illegible] libenter ut [illegible] ingenti amore
[illegible] [illegible] studiis [illegible] [illegible] ita [illegible] [illegible]
[illegible] habeas et amator. Vale [illegible] Deus

Problemata cum expositionibus eorum Per venerabilem virum dominum Magistrum Johannem Germanum de Monte Regio composita pro tabula de primo mobili utili et speciali

problema primum.

Generalem tabule usum imprimis explanare. Numeros intra hanc tabulam positos reputamus arcus circumferentiarum maiorum in sphera contentorum. Eos numeros duplici manente distinctione sunt enim laterales alii, alii areales. Porro laterales bipartito ordine currunt. descendentes quidem, qui sinistro lateri cuiuslibet paginae transversos ab his in frontibus paginarum [illegible] rubris signatos ad nonagenos usque [illegible] crescendi [illegible] Atque hos dicimus numeros nigro pictos. areales vero [illegible] in area tabule [illegible] post quedam ad describendas et abstrusas astronomie consideraciones [illegible] [illegible] supputatori, [illegible] [illegible] quam [illegible] [illegible] [illegible] [illegible] minuta [illegible] anno [illegible] esse [illegible] gradus integros [illegible] [illegible] astronomi [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] libri adherent [illegible] tabula ac [illegible] laterales numeros habeat [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] quo [illegible] [illegible] [illegible] [illegible] [illegible] subiiciant [illegible] quod [illegible] [illegible] Cum vero [illegible] et [illegible] variis [illegible] [illegible] [illegible] [illegible] [illegible] que [illegible] [illegible] [illegible] [illegible] monstrare [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] signatas [illegible] ut [illegible] [illegible] [illegible] [illegible] gradui lateralium [illegible] [illegible] [illegible] tabule [illegible] que [illegible] [illegible] [illegible] ut [illegible] [illegible] minuta. Duos [illegible] [illegible] [illegible] [illegible] alterum [illegible] [illegible] [illegible] [illegible] [illegible] descendentem, et [illegible] alterum ac [illegible] [illegible] [illegible] [illegible] [illegible] minima appellatur [illegible] [illegible] Tabula [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] in fronte tabelle [illegible] sibi [illegible] [illegible] [illegible] [illegible] [illegible] collecto, ac [illegible] a [illegible] [illegible] [illegible] [illegible] memorati [illegible] [illegible] [illegible] [illegible] ad [illegible] [illegible] [illegible] [illegible] [illegible] Hanc nobis tabellam manualem [illegible] in manu supputatoris [illegible] aut [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] volumini, [illegible] [illegible] ad [illegible] paginam tabule generalis accommodari [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Lateraliter

Sunt necessarii. Dupliciter quidem tabulam ingrediendi contingit lateraliter videlicet et arcatim. Lateraliter quidem, dum utrique numeri introitu ad lateralium, foris accipitur inter numeros laterales. Arcatim autem quando alter quidem numerorum introitualium foris, alter autem in area tabule inter numeros principales reperitur. Sive itaque lateraliter sive arcatim tabulam ingrediaris, oportet maiorem numerum in porta transversa idest fronte tabule querendum esse. Verum introitu lateralis utrimque, cum maior utrobique accipi permittit, lateraliter itaque ingressurus tibi, si uterque numerus introitualis offeretur integer, quem maiorem in fronte tabule, veluti iam mox monuimus, reliquum autem in latere subtus descendenti. Nam e directo eius in columpna sua, reperies arcum quesitum. Si vero alteri eorum minutias quevis adiecta fuerit, describe eam ut qui in fronte tabule accipiendus erat, intra sinus cum maior integris primo minoribus et numerum arcalem ut sinus nota cum dicta laterali iuxta eum positum. Deinde minutias que ordinibus integris adiacentes quere in fronte tabelle manualis, minutias autem minuciarum dicta lateralis in latere descendenti quadrantique in angulo communi occurret et subscribe numero arcali iam dudum servato. In eodem itaque latere descendenti quere numerum secundarum si que fuerint differencie lateralis et quod e directo earum inveneris subminutiis in fronte tabelle acceptis subscribe prius notatis unum quodque suo generi. Poteris autem si celeritate calculi gaudes vice secundarum plurium trigenario maiorum accipere unam minutiam primam, aut eas prorsus negligere si pauciores quam triginta fuerint, sic enim semel tantum tabellam manualem introisse sat erit, et nunquam plures quam triginta secundas perdas, que quidem iactura vilis putatur in omnibus fere computacionibus astronomicis. Has autem sicut denominaciones cuiuslibet numeri in area tabelle manualis reperti documento vulgari utendum est tali. Quando aliter quidem duorum numerorum introitualium gradus habet, alter autem minutias primas, numerus posterior columpnelle minutias primas exhibebit, prior autem gradus representabit. Cum vero utrorumque numerorum introitualium minutie significantur, posterior numerus columpnelle secundas, prior autem minutias primas prebebit. At si alter quidem numerorum introitualium minutias primas, alter autem secundas compleatur, posterior numerus columpnelle tercias, prior autem secundas decernet. Decet quoniam huiusmodi numeri omnibus incubitata numerorum varia representationes specialis cognitu est abundeque aplerisque omnibus huiusmodi igitur non ampliorem in presenciarum de ea sermonem facienus. Huiusmodi numeros locis suis oportunis conscriptos, in unam summam congrega, secundas videlicet secundis, minutiasque minutiis et gradus gradibus addendo. Ubi autem fractio quelibet formula operacionis cogente, sexagenarium transgressa fuerit numerum, unitatem ordini precedenti adicias, quociens a posteriori sexagenarium tolli possit, quemadmodum in aliis supputacionibus similibus fieri solet. Si autem maiore numero introituali existente in tergo, minor habeat fractionem aliquam, non aliter quam operaberis, prius hoc unus differenciam lateralem, hic differenciam animadversa quod ubi iam dudum accepisti differenciam minutias habentem descendentem assumas. Utroque demum numerorum introitualium minutias habente opus ingeminabitur intrando enim tabellam manualem tam cum minutiis iam expositum numeri introitualis maioris, et dicta ~~descendenti quicquid~~ lateralis quam cum minutiis numeri minoris ac dicta descendenti quicquid ex tabella manuali colliges numero arcali tabule generalis superaddes. Duro crediderim hominem esse capite, qui hec precepta vix etiam ad medium transcursa, celeritate ingenii sui non ante capiet. Si quis tamen adhuc scrupulus animum torqueat exemplari demceps instruccione paratus et avelletur. Hactenus de introitu laterali nunc arcatim ingrediendo tabulam, quod facto opus sit [illegible] depromemus. Maiorem duorum introitualium in fronte tabule generalis accipito, qui si fuerit integer nullo videlicet fragmento imminutus, quere sub eo in area tabule reliquum idest minorem introitualem numerum. E directo enim eius si modo ad unguem repertus fuerit, habebis arcum quesitum, sinistrorsum in latere subtus descendenti

Arcatim

Si autem huiusmodi secundum introitualem numerum non inveneris precise in area tabule, accipe proximo minorem eo, numerumque lateris rubri descendentem ei oppositum cum differencia descendenti notato. Deinde numeri tui cum quo intrare volebas, et numeri minoris eo in tabula accepti differenciam elice, quam quere in area tabelle manualis in ea columpnella cui inscribitur numerus minuciarum in differencia rubra descendenti extiterant, et e directo eius in latere rubro sinistrorsum habebis minucias ad numerum prius notato addendas. Si que tamen secunde in differencia descendenti fuerint eas negligere poteris, nisi trigenarium superent numerum; tunc enim loco ipsarum unam minuciam primam accipere licet. Hoc nempe pacto nichil erroris sensibilis operi tuo immiscebitur. Et si primus quoque introitualis numerus videlicet qui in fronte tabule accipiendus erat fractione non caruerit, opus iam nunc expositum conduplicare oportebit. Nam primo intrabis cum numero qui proximo minor est eo quem in tabulam mittere volebas, et accipiendus servandusque erit numerus in latere rubro descendenti occurrens veluti antea monitum est. Deinde pariter agendum est cum numero proximo maiori et omnino uti prius accipiendus est numerus in latere rubro descendenti, utriusque demum et prius servati differencia animadvertenda est, et hanc itaque differenciam cum minuciis numeri introitualis maioris mitte in latera tabelle manualis, quodque in angulo communi ut assolet offertur, minue ex maiori duorum numerorum paulo ante elicitorum eo videlicet qui per primam operacionem simplicem inventus est; sic etenim notus relinquetur arcus quem petebas. Illud autem circa introitum arealem non est oblivione pretereundum, quod quando duo numeri in tabulam mittendi sese non excedunt, quadrantem autem circuli idest nonaginta gradus semper pro numero quesito accipias. Aliud demum memorie tue adminiculum trado, ut quociens tabulam generalem lateraliter ingredieris tabellam manualem lateraliter quoque si opus fuerit intrabis, et si arealiter huic numeros quosque inmiseris illi arealiter quoque si res ipsa postulat minucias inserito. Rerum exemplari supputacione facilius forsitan intelliges quecumque tradita sunt. Proponantur michi duo numeri, unus quidem graduum 27 alter autem 39 lateraliter in tabulam mittendi. Accepto numero maiori 27 graduum in fronte tabule sub eo in linea rubra secunde columpne animadverto numerum minorem 39 graduum, et e directo eius invenio numerum arealem graduum 27 minutorum 22 et secundorum 13 quem querebam. Item offeratur in maiori numerus 43 graduum et 27 minutorum, minor vero 28 graduum. Intro ut prius cum 43 et 28 invenioque numerum arealem 36 22 22, differenciam lateralem autem 33 2. Deinde sub 27 minuciis acceptis in fronte tabelle manualis in versu 33 invenio minucias 12 41 subscribendas numero areali antea notato. In eadem quoque columpnella iuxta 2 secundas differencie lateralis reperio secundas duas supponendas item numero areali cum reliquis prius subscriptis, quibus cunctis in unum collectis aggregatus arcus quesitus 36 39 41. Supervacaneum autem deinceps videtur subnectere exemplarem calculum, minore duorum numerorum introitualium minucias habente, cum ea nimirum nullo momento a predicta differat supputacione. Sed offerat quispiam utrumque numerum fractum, maiorem quidem 62 37 minorem 44 23. Intranti ergo michi cum 62 et 44 gradibus occurrit numerus arealis 27 22 26 cum differencia laterali 31 24 et differencia descendenti 24 39. Cum 37 itaque minuciis numeri maioris et 31 differencie lateralis elicio per tabellam manualem 19 7 quas subscribo areali numero supra notato, non aliter cum 23 minuciis numeri minoris et 24 minuciis differencie ~~lateralis~~ per tabellam manualem colligo 33 14 subscribendas numeris predictis, quibus tandem in unam congestis summam 28 13 [illegible] orientur. In huiusmodi autem supputacionibus secundas si trigenario numero pauciores sint negligere concedo, pro quibus vero trigenarium superantibus una minucia prima haud absurde supponetur. Hac quippe ratiuncula si quid preteribit nequaquam ab uno minuto ultra recedere poterit. Hec de introitu laterali quam brevissime. Nunc ad introitum arealem animus appellendus est. Sint duo numeri propositi, quorum alter quidem graduum 39, alter vero gradus 30 minuta prima 10 et secunda 14 complectitur. Video maiorem in fronte tabule generalis, minorem autem sub eo in tercia columpna offendo inter

Cautela in introitu Areali

Alia

numeros areales. cui quidem sinistrorsum prepositus numerus rubor 43. graduum in latere talis columpne. is igitur est quem querebam. Sed si alter arcuum gradus 44. alter autem gradus. 39. et prima. 24. habuerit. iterum accipio maiorem in fronte tabule. sub quo nullum arealem numerum offendo equalem reliquo datorum numerorum. verum proximo minorem eo video. 39. 32. 20. quam ubi ex proposito numero de-mam. relinquuntur prima. 0. secunda. 40. quibus nomen tribuo differencie minoris numerum ceterum rubeum in linea descendenti repertum e directo huius numeri arealis. 39. 32. 20. qui est. 41. gradus. servo. Deinde differenciam descendentem ibidem repertam que est. 39. 42. idest. 40 fere prima. accipio in fronte tabelle manualis sub qua directe descendendo invenio propinque satis differenciam minorem et directo 19 primorum in latere descendenti tabelle manualis. hec ergo. 19 prima minuta adiungo 41. gradibus antea servatis. ut concrescat arcus quesitus. 41. 19. Amplius obiciat michi aliquis hos numeros. maiorem quidem. 61. 14. minorem vero. 42. 46. accipio. 61. gradus pro numero maiore. omissis minutis. minorem autem uti propositus est dimitto. et per omnia veluti iam nunc expositum est. invenio. 60. 6. quem numerum seorsum custodio. Non aliter cum. 68. gradibus tamquam maiore numero introitiali. assumendo minorem tamen quo antea usus sum reperio. 49. 23. Inter hunc autem et prius custoditum numerum differencia cadit. 23. primorum. que quidem cum. 14. primis minutis iuxta 61. gradus numeri maioris iacentibus lateraliter inmitto in latere tabelle manualis. et in angu-lo communi ut assolet. excipio prima. 10. secunda. 24. subtrahenda a. 60. gradibus et. 6. primis ante hac servatis. quo facto relinquuntur gradus. 49. minuta. 44. fere. me et tantum enunciabo arcum ab initio quesitum. Habes itaque universalem tabule usum. continuo itinere expositum. in quo si crebro exercearis nichil prorsus totius operis fugere te poterit. cum posterius etiam preceptis quicquid agendum proponatur vel laterali introitu vel areali. nunc quidem simplici. nunc autem iterato quemadmodum infra videbitur absolvemus. Illud demum te memini meminisse oportebit. quod quando numerus introitualis quadrantem circuli transcendit non ipsum met. quia nusquam in tabula scribitur. sed residuum eius de semicirculo in tabulam ducas. quod eciam ubi opus fuerit non nusquam locis propriis admonebimus. Porro si quando introitu areali agendum fuerit per numeros prope equales. pre-sertim si parvi fuerint. contingit supputatorem aperitive parumper aber-rare non propter imbecillitatem tabule. quippe que certam ac geometricam innixam fundamentis habet firmitudinem. verum quoniam latera sua graduatim incre-menta aut decrementa numerorum arealium. tenorem non servant equalem. quo quidem fieri necesse est. ut si qua gradibus integris adhereat minucia. non tantum porcionem de differencia numerorum arealium iusta proporcione suscipiat. quanta pars ipsa fuerit unius gradus sed aliquanto maiorem. quoniam differencie subiectice numerorum arealium paulatim deficiunt. Talis igitur cautiuncula calculum tuum elimabit. numerum areali introitu elicitum. rursus in tabulam mittito lateraliter. cum maiore duorum numerorum per quos eliciebatur. et si in area tabule secundum legem introitus lateralis offendes reliquum propositorum numerorum. idest minorem. certa fuit suppu-tacio. Sin aliqua fuerit differenciola. eam areatim transfer in tabellam manualem cum differencia laterali iuxta angulum communem tabule generalis reperta. quod si [illegible] in latere descendenti tabelle manualis occurret. aufer ex numero primum elicito. Hoc namque pacto precisius excudetur numerus quem querebas. Si curioso delectaris computo. talem deinceps iterabis emendacionem. donec per introitum lateralem

Cautela circa in-troitum Arealem

Cautela de [illegible] [illegible]

Velut enim nunc dictum est, experiment(um) inter duorum numerorum ab invicem propositorum. Quae res et si facillime usu veniat exemplo tamen breviusculo inrubrenda videtur. Proponat(ur) m(ihi) quispiam posse duos numeros ·22·31· et ·23·14· alteram in tabulam mittendos. Primo utrumque alterum tabule illatis cum radicibus superiorem ellatus numerus ille ·11·24· quem ducto in maiore

propositorum numerorum scilicet ·22·31· lateraliter in tabula transfero, excipio

quidem hinc ·23·11·34· qui si equaret minorem propositorum numerorum satis digestus haberetur numerus primo interiori areali ellatus. Iam vero superat enim tabulas ferme minimas primis, quas quero in area tabelle minimas sub ·8·22· differentia videlicet laterali iuxta angulum communem in interiori laterali reperta et e directo eius in latere tabelle colligo ·22· ferme minimas quibus demptis ex numero primo ellato relinquitur ille ·11·23· et tantus debebat esse numerus ab invicem quesitus. Nam si eum

rursus in tabulam duxero, cum maiore propositorum numerorum scilicet ·22·31· excipiam hunc numerum ·23·12·39· qui a minori propositorum duorum primo secundis differentiis remotus, quod quidem haud multum intolerabile esset.

Non enim usque quaque secundas minutias adinvenire per hanc tabulam depromptum est preterea sicut neque per rationem simulationis secundaliter etiam idest sine totum immensa quadam particularium multitudine que periude[?] ad nos cuntur differentias. Tertiam qui superflua quoque calculo secundarum tertiarumque ac ulteriorum minutiarum ad intima celorum motibus supputationibus astronomicis penetrare conatur. Hii nescio quid demeruit et si per officium dicam pro quidem temporis fuerint propterea huius arte tertias primas etiam minutias observandas qui per instrumenta quibus tota ferme astrorum disciplina innititur animadverti penitus nequeunt.

Verum huiusmodi censuram viri ingenium fugiunt qui ad precepta proxima descendere tempus hortatur.

## Problema Secundum

**Cuiuslibet puncti Ecliptice declinationem ab Equinoctiali circulo si quam habet inquirere**

Porta in tabulam latitudinis lateraliter cum maxima solis declinatione distantia puncti dati ab ultimatra sectionum equatoris et Ecliptice videlicet cui puncto dato minor fuerit et in angulo communi reperies declinationem quesitam lateralem quidem si propositum punctum in medietate ecliptice boreali extiterit, meridionalem autem si semicirculum Ecliptice austrinum possideat. Exemplum gratia: Iubeor memorare declinationem puncti terminantis quintumdecimum arietis gradum. Accipio itaque maxima solis obliquationem que per experimenta recentiora gradibus ·23· et minutiis fere triginta complectitur. Sub tribus autem et viginti gradibus in fronte tabule repensis e directo graduum ·14· in eorum numerum arietem ·9·28·14· cum differentia laterali ·12·19· deinde cum triginta minutiis numeri maioris ·0·12· minutias differentie lateralis intro tabellam marginalem lateraliter reperio que in angulo communi ·1·0· Similiter cum eisdem ·30· minutiis et ·19· secundis differentie lateralis eandem tabulam marginalem ingrediens nichil offertur sese nonem secunde cum ·30· tertiis. Has itaque minutias primas et secundas ex tabellam marginalem elatas adiungo numero areali sed hac servato et consequitur declinatio quesita ·4·44·12· Talis declinatio breviusculu

colligeretur si medietatem diferentie lateralis addendo numero arcuali qui singulis minutis tabule et singulis gradibus adiacentes sunt medietas unius gradus vel ipsa tota diferentia lateralis deberet. Item iuvat inquirere quia quam facili tabulam declinationis solaris quesitis subiectam causa conscire patet, in orbis habens quantumcunque suppositionis maximam solis obliquationis que perfecto si peritos astronomorum observatoribus videlicet quod assiduis inspectionibus fidelis habetur variata vero invenitur. Cum unquam non per libros magis per calculo quorum iuvat reperiri instrumenta sua accuratissime prosecutos quorum sensu vero exigentes si paulo negligentius eum deprehenderis universa Astronomia sua fluctuet necesse est.



Proposita declinatione solis quantalibet cui puncto ecliptice ipsa respondeat explorare. Hoc problema precedentis conversionem introducunt. Primum autem quia ad opus descendere considerandum est quamlibet declinationem, maxima dempta, quatuor punctis respondere. Sunt itaque in ecliptica duo puncta declinationem perfectam ea videlicet que et equinoctiali circulo gemina sunt: duo quoque declinationes maximas et equales, quamvis denominationis diversas habentia que sunt capita cancri et capricorni. Preter hec autem memorata puncta si quodlibet in ecliptica punctum tria alia eandem cum ipso vel equalem suscipientia declinationem reperire contingit. Talia enim quatuor puncta equaliter ab equinoctiali circulo distantia necesse est deprehendi, atque ideo equales sortiri declinationes quemadmodum demonstrationibus certa cognoscitur.

Proposita igitur declinatione quantalibet quatuor sit uniuscuiusque quatuor locorum ei respondentium et ab alterutra sectione inspicientium sive polium denominationum aut alicuius horum a capite arietis in duodecim signa nequaquam comprehendemus nisi qua mediante ecliptice puncto propositum nostrum comprehendit sit Cum in una quartarum ecliptice quas autem medietatis complectitur ascendente videlicet aut descendente. Ut igitur propositum assequare intra tabulam arearum cum maxima solis declinatione et ipsa data solis declinatione ita e directo numeri arcualis in linea rubea descendente colliges quantitatem arcus quesiti.

Exemplum. Ponatur declinatio quesita graduum 18 et minuta 23 cui quibus debeant arcus ecliptice sic experior. Intro primo arearum cum 23 gradibus tanquam maxima solis declinatione accipiendo videlicet columnas 23 graduum in fronte tabule sub quibus deinde quero declinationem propositam 18 · 23 · que quoniam inscriptam integrum afferre non numeros arcuales accipio huic proximo minorem scilicet 18 · 18 · 4 · iuxta que versus sinistra iacent gradus 59 · ad partem servanda cum diferentia descendentis · 18 · 21 · diferentia autem numeri arcualis iam accepti et declinationis proposite est · 8 · 44 · quam quero inter numeros arcuales tabelle marginalis sub 19 · minutis cum diferentia descendentis · 18 · 21 · idest decemnovem fere minuta et conterit modo numerus proximus · 8 · 42 · cui sinistrorsum apponitur minuta 28 adiungenda · 59 · gradibus supra servatis. Iam igitur ne quoniam aliud absolutum esset si maxima solis obliquatio: solaris graduum 23 perverse complectens. Eius autem vero declinationis proposita debet 59 · graduum et · 28 · fere minutis ab altera sectionum equinoctialium quantitate Ratione quia memorata solis maxima declinatio minor quoniam est · 23 · minor autem · 22 · graduum intro tabulam cum eius · 22 · gradibus prius

☉ maxima declinatio 23 graduum et 30 minutorum
☽ maxima latitudo 5 graduum.

quesiti cum maxima solis declinatio et non alia sit ante hanc precedente
circa 23 gradus et 33 minuta cum inter eam [illegible] [illegible] fuerit
in uno gradu [illegible] 40. Hanc itaque differentiam [illegible] in latere tabule
equalitatis [illegible] 20 [illegible] que in maxima solis declinatione iuxta 23
gradus [illegible] et in angulo communi [illegible] colligo minuta
44 idest dimidium de uno gradu et 4 minuta habes [illegible] minuta an
sero ex 23 gradibus et 33 minutis idest ex uno per primum [illegible] tabule
generalis [illegible] sic tibi relinquuntur arcus [illegible] quesitus 22 graduum et 49 minutorum.

Problema quartum

Latitudinem lune investigare. Intra latitudinum cum distantia vera loci lune a nodo proximo et cum maxima lune latitudine
reperies cum in angulo communi latitudinem quesitam. Conversa autem
ex latitudine lune subiecta augmentum latitudinis lune addisces in
nodo [illegible] cum latitudine qualibet proposita maxima lunaris latitudinis
habebis cum in latere sinistro descendentem e directo cum arcum distantiam
lune ab altero duorum nodorum. Sic breviuscula quadam [illegible] ex
distantia lune ab altero duorum nodorum latitudinem suam et versa vice
ex latitudine supposita remotionem a nodo supputare docuimus [illegible] ad
solem in simili calculo [illegible] opere [illegible] gemino [illegible]
Distantiam autem lune a nodo proximo per augmentum latitudinis
facillime agnosces. Nam si tale augmentum latitudinis quadrantem [illegible]
idest nonaginta gradibus minus fuerit [illegible] [illegible] distantia
petita. Si vero tria signa superaverit [illegible] sex signis [illegible]
dempto eo a sex signis distantia lune a nodo unde relinquetur. Et si
ultra sex [illegible] novem vero signa [illegible] [illegible] ex eo [illegible]
[illegible] distantia a nodo quam volebas. Et cum [illegible] novem signorum
[illegible] residuum de toto [illegible] remotione lune a nodo [illegible]
Igitur quoque distantia ab altero nodorum data augmentum latitudinis
[illegible] non poteris si [illegible] lune in [illegible] suo [illegible] [illegible]
[illegible] ampliorem [illegible] [illegible] [illegible] tuo
ingenio relinquimus ne [illegible] in rebus minimis [illegible] videamur.
Si forte cui absentamen videatur [illegible] a solis obliquatione ad lune la-
titudinem repente transitum fecimus [illegible] non [illegible] [illegible]
[illegible] similitudinem [illegible] animadverterit, [illegible] et [illegible] habes [illegible]
[illegible] lune latitudo [illegible] solis declinatione [illegible] quia latitudo
maxima in gradibus constat [illegible] huius autem obliquationi [illegible]
fragmenta graduum adherent. [illegible] tabula latitudinis lunaris
integram habes in ea pagina cuius frontem [illegible] [illegible]
numero. [illegible] aut [illegible] [illegible] [illegible] in austrina [illegible]
lune latitudo ex ipso augmento latitudinis quemadmodum computatores
[illegible] [illegible] [illegible] oportebit. Nunc in exemplo videamus
[illegible] sit lune latitudo habentis distantiam a nodo 23 graduum
[illegible] in fronte tabule [illegible] gradus maxime latitudinis in latere
[illegible] descendente 23 gradus iuxta quos [illegible] 2.16. [illegible]
[illegible] primo lune quesitam latitudinem. Porro [illegible] [illegible] lune
remotionem a nodo dum latitudo est 1.20.24 [illegible]
[illegible] tabule ubi [illegible] [illegible] [illegible] [illegible]

inferiore data latitudine 1. 51. 52. min. 19. graduum latitudinis. Ille autem numerus arcualis demptus ex ea latitudine relinquit 2. 47. 41. Primum differentiam video in area tabelle manualis sub 4. minutis erat enim illa differentia in tabula generali 2. 45 et e directo sinistrorsum in latere tabelle sunt reperta quatuor minuta adiungenda. 19 gradibus ante hec repertis distantia igitur a nodo erit graduum 19 et minutorum fere 52. Problema 4tum

## Uniuslibet arcus Ecliptice ab Equinoctiali sumentis initium ascensionem in Spera recta dinumerare

Quere arcum cum complemento arcus Ecliptice dati, et complemento declinationis eiusdem, quodque in latere rubro descendente occurrerit ex contra circumferentie minuatur, nam quod reliquum erit ascensionis rectam manifestabit quam querebas. Complementum autem arcus cuiuscumque est differentia eius et quadrantis circuli, qui nonaginta continet gradus. Res si arcus cuiuspiam aliunde quam ab equatore inchoati ascensionem rectam metiri libeat, cum ipse sit compositus duorum arcuum Ecliptice ab equatore inchoatorum, utriusque eorum ascensionem rectam accipies et alteram ex altera demens residuum pro ascensione quesita tenebis. Operis autem dominetur sublimius de arcu Ecliptice quadrantem non superante. Nam si propositus quispiam arcus Ecliptice quadrante circuli maior extiterit, minor quam semicirculo, subtrahemus eum ex semicirculo, et residui modo predicto invente ascensionem rectam ex semicirculo minuemus sic enim ascensio recta arcus propositi relinquetur. Si autem arcus propositus semicirculo quidem maior fuerit, tot autem sublatis quatuor ablato inde semicirculo reliqui ascensionem rectam innuemus modo predicto. Ipsa enim adiuncta dimidio circulo ascensionem rectam arcus propositi constabit. Res si arcus Ecliptice propositus tres quartas circumferentie excesserit, eum ex toto circulo deme, et reliqui ascensionem rectam quemadmodum expositum est ablatam ex toto circulo reiice, ut relinquatur ascensio recta arcus propositi. Quadrantem autem Ecliptice consecutive quadrantem equatoris illi quoque duplicato, huius duplicatum, illi triplicato huius triplicatum in spera recta deberi, nemini mediocriter docto astronomo dubium erit. Cumque quidem planum est operacio ad fastidium, nisi habitudo ecliptice ad equatorem te presens lateat.

Verbi gratia sit exemplum ut primus cancri gradibus Arietis quorum ascensionem rectam quero tali ordine. Complementum quatuor graduum est .84. declinatio autem puncti terminantis gradus arietis gradus est duorum ferme graduum cuius declinationis complementum est .88. Introitus tabulas arearum cum .88. et .84. et invenio in tenore tabule generalis problematis arcum .84. graduum. et .54. minutorum qui demptus ex .90. gradibus relinquit ascensionem rectam .5. graduum et .54. minutorum. De arcu autem Ecliptice non ab equatore sed aliunde initium sumente exemplares computaciones non subiungimus cum formula operationis similis est illi quam nunc proposuimus si eam ingeminaveris. et postremo duarum ascensionum hoc pacto inventarum alteram ex altera subtraxeris. Problema 5tum

## Ex ascensione recta proposita, ab alterutra sectionum equinoctialium incipiente arcum Ecliptice sibi debitum indagare

Quamquam presens problema et precedens

Complementum arcus quid sit

per alias quoque tabulas inveniri absolute nemo nesciat, in quo generalis [illegible] atque utilitas harum tabularum perpetua clarior fiet. Libuit ad hoc reponenda tabulam ipsam accomodare. Intra igitur lateralibus in complemento ipsius ascensionis recte et maxima solis declinatione, quas quidem angulus gradus offerunt ex nonaginta gradibus minue. Cum residuo autem supra ascensione recta, arcum denique intra tabula reperies. Itaque ex decem [illegible] arcubus in linea rubea descendentis arcum Ecliptice quesitum. Hoc quidem dum ascensio recta proposita minor fuerit quadrante. Si vero quadrantis precise fuerit, arcum quoque Ecliptice 90 gradibus numeratum offert. Si vero quantitas circumferentie superaverit, minor hic circumferentie presentis, subtrahe ipsam ex semicircumferentia et cum residuo fac ut supra monitum est. Arcum quoque Ecliptice postremo relatum ex dimidio circulo aufer, reliquum tibi ostendet arcum Ecliptice quesitum ab [illegible] arcubus numerandum. Si ascensio proposita semicirculo maior extiterit, minor hic quadrante triplicato, demas ex ea dimidium circulum, et cum residuo arcum Ecliptice ut ante inveniens addes semicirculum quem demiseras semicirculo adiectis, conflabit arcum Ecliptice que postulabas. At si ipsa ascensio recta tres quadrantes circuli transgrediatur, eam ex toto circulo minue et cum reliquo ut superius traditum est ecliptice arcum agnosce, hunc postea integra circumferentia decussis relinquet arcum Ecliptice quesitum. Verba quidem complusfula videmus. Erroneo autem fuisse tota tam brevis quam facilis sit, singulis hic atque reliquis si [illegible] te posse propositum absolute, quam tabulas ascensionum rectarum refertur. Non ut [illegible] infirmabis. Cum Ecliptice huius [illegible] solum non [illegible] hoc opus, quamvis per ipsum nova ascensionum rectarum tabula conscribatur, item quo obliquarum solis cum reliquis ex ea pendentibus componi possint et minimum debeamus, nam presertim etate hac superstite. Cum maxima Solis declinatio minor est ea, que passim ab astronomis supponitur. Compertum est enim non minus certis quam serenissimis experimentis, eam haud quaquam transcendere gradus tres et viginti cum triginta minutis quadere alibi lucis dissertationis [illegible] debuimus. Innumeras itaque protelles instar formidemus [illegible], hec nostra parient tabulas, quemadmodum inferius pedetentim videbimus. Hunc exemplificare accipe compositionem. Sit oblata ascensio recta 66 gradus cui quantitas Ecliptice arcus debeatur explorandum est. Complementum huius ascensionis est 24 gradus quos in maxima solis declinationis 23·30 in tabulis lateralis in tabulis et invenio tibi infra 10·41·18. Hunc minutum demo ex 90 remanent 79·18·42. Illud quo re [illegible] cum ipsa ascensionem recta proposita arcum in tabulam fuisse alio [illegible] per supputationem colligo arcum 67 gradus et 29 minute quam quesitum.



Solis declinatio

Septimum

## Quis arcus Ecliptice suam ascensionem rectam equaverit, altero termino eius cognito, reliquum quoque manifestare.

De arcu Ecliptice intelligendus est qui totus inter duo proxima puncta equinoctialia concluditur, ad necessitatem hic destinatus. Intra itaque tabularum arcuum cum complemento declinationis que debet puncto terminali noto et maxime declinationis solis. Item quam in latere rubeo descendentis ut mansit est colligitur ex quadrante [illegible] hic relinquet declinationem alterius puncti finalis. Hinc ex [illegible] complementatione puncto in solis tribuuntur declinatio innotescet. Hic exemplo supponatur arcus Ecliptice a puncto [illegible] finalis initium quem volumus propositum equalis sit ascensionum sue recte

Cuius scilicet quem terminum eius arcus declinacionis puncti dati est .11. 30. cuius complementum .18. 30. cum complemento maxime declinacionis solaris .66. 30. acceptum tabulam redeuntem incidit [illegible] sub illa .69. 30. 30. cuius complementum est .20. 21. 30. declinacio videlicet puncti sinistri que quidem debetur gradibus duobus et [illegible] minutis geminorum. Arcus vero eclipticae contentus illic desinit tamen completur graduum .32. minuta .3. et tantum quamvis ascensio eius recta comprehendit.

Vnctum eclipticae terminans arcum qui ascensionem suam rectam quam maxime superat invenire. Quam tabula lateralem duobus numeris equalibus forte incidentibus. et si in angulo qui occurrit complementum maxime declinacionis solaris hic est. Cum aliud querens [illegible] in angulo hunc reperias. cum aliis item equalibus numeris tabulam lateralem ingredere experiendo cum angulo quibus. hoc opus totiens iteratum assumpto semper novis numeris equalibus. donec in angulo qui offendas cum proximo [illegible] complemento maxime declinacionis solaris. Item quod proximo [illegible]. horum numerorum differentiam nota. qui ipsa debetur cum gradu. Sit etiam numeri [illegible] complementi maxime declinacionis solaris differentia. quam, ducta per .60. minutias et productum divide per etiam maiorem cum gradu altiore. que admodum in aliis similibus calculis fieri solet. numerus cum quociens. [illegible] minucias adiungendas. alteri duorum numerorum equalium, cum quibus [illegible] numerum proximo [illegible] complemento maxime declinacionis solaris. Ex tali autem additione nascetur complementum declinacionis, que debetur puncto proposito [illegible] eius declinacio innotescet. [illegible] si terminum [illegible] puncti ipsius agnoscere. Exemplum. Si cum in fronte [illegible] in latere tabule accepero gradus .12. in angulo qui habebo .66. 8. 14. Si autem .12. gradus geminatos hoc pacto lateraliter in tabulam infero offendit sub illa .61. 51. .18. cuius a precedenti numero [illegible] tabula [illegible] est .1. 23. 3. que [illegible] a [illegible] Item complementum maxime declinacionis solaris superat [illegible] dictorum [illegible] hoc. differentia .12. 24. quam si reduxero per .60. [illegible] et inde [illegible] partiar per .1. 23. 3. aggregabo in [illegible] quociens .14. 23. quas minucias adiungo [illegible] [illegible] qui est .12. in [illegible] sub illa .12. 14. 23. que est complementum declinacionis puncti quesiti. [illegible] ipsa declinacio emergit .10. 22. 11. que quidem debetur gradibus .10. [illegible] puncti .12. [illegible] et triginta ferme secundis. Puncti igitur eclipticae [illegible] eclipticae arcum terminans [illegible] querebatur. Item si [illegible] [illegible] ascensionem eius rectam offendis .23. 22. 30. que una cum ipso arcu eclipticae quadrantem circuli complectitur. Quod quidem non fortuito evenit verum demonstracione certa roboratur, qua theodosius in [illegible] problemate [illegible] de spericis [illegible]. Cum autem sit huiusmodi excessus quo abundat arcus eclipticae memoratus ultra ascensionem suam rectam haud quaquam ignorabitur [illegible] arcum eclipticae iam nominatum. Hac numeracionis formula, investigabis arcum circuli declivis lune, qui arcum eclipticae sibi respondentem quam maxime superat, assumendo complementum maxime latitudinis lunaris idest .84. [illegible] vice complementi solaris declinacionis maxime. simul etiam excessum huiusmodi explorabis. qui quidem fere nunquam [illegible] gradus attingit. Quo demum alterum illorum fieri [illegible] est. aut motum [illegible] lunaris in suo circulo declivi esse irregularem: aut calculum [illegible] [illegible] [illegible] quidem desistere a veritate nunc vero sufficientem quidem [illegible] cum gradus [illegible] horis incorporacionis [illegible] astronomi docti. qui inequalitatem motus lunaris demonstracionibus [illegible] supputarunt.

Ortum

tale complementum maxime declinacionis solaris. si fieri potest. Item si [illegible] [illegible]. tale [illegible] [illegible] donec in angulo qui offendit

omnes lineas mediorum motuum lune una in superficie plana quadrati inscripto
circulo declinationum lune statuisset. Secundum vero absentium et pigrorum simile
videbitur istis superstitiosis numeratoribus, qui omnes motus non modo lu-
narium etiam aliarum stellarum sese adinvenisse mirentur, gestiunt et fal-
so iactitant. Quippe qui nisi ad seminalia et circulos ac albarest descendant
minimas radices et ultimam se fecisse computationem arbitrantur, ignorantes tamen
fundamenta hinc generandi supputationum absque oculo inspectore tam die
quamvis qui quemadmodum in computationibus multifaria falsitas per eam et cal-
culo sequatur, rectitudinis solute plerumque admittit. **Problema nonum**

## Data congerie ex arcu ecliptice et ascensione sua recta utriusque arcuum differentie

Ex precedenti elicias maxima differentiam arcus ecliptice et ascensionis sue recte qua latera
tabule inscribas cum congesta congerie habebis eam in angulo communi utriusque qua
arcus ecliptice quesitus excedit ascensionem rectam eius itaque ex data congerie
aufer eam reliqui dimidium notificabit ascensionem quesitam cui si
eam deinceps adieceris dicam congeries arcus ecliptice quesitum. In exemplo
detur mihi summa viginti graduum quam efficit arcus quispiam ecliptice
cum ascensione sue recte maxima itaque dicam que inter arcum ecliptice
et ascensionem suam rectam cadit per reperio .2.50. qua lateralibus mitto in
tabula cum .20. gradibus et colligo in area tabule .0.41. ferme idest dicam
proposita arcus ecliptice et sue ascensionis recte qua demo ex data congerie
.20. graduum et relinquuntur tunc illic 19. quorum dimidium .9.30.50. ostendit
ascensionem rectam et ascensionem superaddo memoratam dicam et congeriem
arcus ecliptice quesitum .10.54.50. **Problema decimum**

## Amplitudinem ortiva cuiusque puncti ecliptice ab equatore declinantis in omni orizonte computare

Quod de punctis ecliptice docebimus ad omnia quoque alia puncta celi
in quacumque regione orbis soluta poteris accomodare, modo declinationes
eorum cognite sint. Intra igitur tabulam areatim cum complemento al-
titudinis polaris in tua regione et declinatione puncti propositi recte
sicut enim in latere descendenti tabule amplitudinem ortus qua quelibet
meridianam si punctus datus ab equatore ad australem vertit regionem de-
clinet septemtrionalem aut si ad aquilonem vergat. Et licet perfecte te
ignorare quod amplitudo occasualis cuiusque puncti celeste equat am-
plitudinem ortus sui et ad eandem orizontis partem ad quam ipsa ampli-
tudo ortus porrigi debet. Amplitudinem autem ortus si forte obliviscaris
vero arcum orizontis circuli equinoctialis ac puncto oriente interiacentem

Similiter amplitudo occasus est portio orizontis que inter equatorem
ac punctum occidentem claudit. Tam exemplari uno sem pla
nis accipies volo scire quantum ortus amplitudinem habeat finis
quindecimi gradus arietis in regione latitudinem .48. graduum obtinente declinatio puncti dati est .4.44.54. complementum autem al-
titudinis polaris sive latitudinis regionis est .42. cum quo quidem complemento et declinatione memorata areatim ingrediens mihi ex
preceptis offertur amplitudo ortus quesita .8. graduum et .42. fere
septemtrionalis quidem quod punctum ecliptice datum est signi borealis

## Ex amplitudine ortus supposita puncti eclipti[ce] declinationem ipsa debetis agnoscere

Possidere
Intra lateraliter cum comple-
mento altitudinis polaris et ipsa ortus amplitudine inquiris cum

58

Amplitudo ortus

Amplitudo occasus

XI

Communis declinationum puncti quesiti manifestabit unde et per eorum complementum ipsum deprehendere dabitur potestas. Cognovisse te oportebit duobus ecliptice punctis in eodem parallelo existentibus eandem esse prorsus ortivam amplitudinem, sicuti etiam utriusque punctis circa solstitialem equaliter habentibus declinationes ortive amplitudines debentur equales quarum utraque alteri atque alii denominate que ex puncto ecliptice investigando preclusus iter. Si enim amplitudo ortus meridiana fuerit punctum quod ecliptice in ipsa respondet in parte meridiana repertum necesse est. Amplitudo autem ortus septentrionalia puncto ecliptice boreali iuste tribuetur. In orizonte autem recto sive habente polos declinationum ita amplitudo ortus cuiuslibet puncti a sua non differt declinatione. Sed vide hic quando illudaris a quopiam insidiatore proponente amplitudinem ortus nulli puncto ecliptice accidentem verum cuidam alii puncto celi signorum semitam deserenti. Tali autem ludibrio prevalebis si per amplitudinem ortus datam velut pauloante monuimus declinationem inveneris. Ea enim si maximam solis obliquationem transgrediet nullus ecliptice puncto datam ortus amplitudinem suscipiet. Si vero moderata solis maxima declinatione non superaverit opus invenire puncta ecliptice iuxta traditionem superiorem in tabulis debetur ortiva amplitudo. In exemplo res apparebit facilior. Sit amplitudo ortus proposita 21 graduum et 21 minutorum sumata superiori regionis latitudine intrabo tabulam latitudinis cum dicta ortus amplitudine et complemento latitudinis regionis adest. 65. gradibus inveniam quod declinationem 19. 21. [illegible] in demum puncta ecliptice respondentia per decimum problema [illegible] nam illud aut ipse erit aut finis octavi gradus [illegible] aut vicesimi secundi Leonis aut octavi gradus Scorpionis aut vicesimi sexti Aquarii. Problema igitur quarta ecliptice punctum datam ortus amplitudinem [illegible] oportet suppositum problematis nihil est quod in [illegible] te latere potest. Item si ex amplitudine ortus data latitudinem regionis elicere velis ne proprium et paulo post problema fiat eo [illegible] latitudine declinationem ad eam amplitudinem pertinente intrabis circulum cum ipsa amplitudine ortus ac memorata declinatione [illegible] quod in latere sinistro [illegible] colligetur ex quadra [illegible] ablatum relinquet regionis latitudinem quesitam. Cumque res exemplaris [illegible] advertere superfluum videtur cum nihil [illegible] difficultatis [illegible] alia huiusmodi proposita contineat etc.

## Problema duodecimum

In omni regione arcum diurnum puncti ecliptice quod cumque dederis numerare. Quere arcum [illegible] in duobus complementis declinationis videlicet ipsius puncti et amplitudinis eius ortive. Habebis enim in latere tabule descendenti arcum semidiurnum quesitum si punctus ille dimidia ecliptica meridianam possideat. Si autem in septentrionali fuerit arcum hic prius elicitum ex semicircumferentia minue, reliquum enim [illegible] semidiurnum reputabis. Eo demum arcu semidiurno duplicato diurnum arcum totum cognosces. Ex hiis duo capita Arietis et Libre in omni regione preter ea que sub polis arcus diurnos habere semicirculares [illegible] arbitramur quare per tabulam hanc illud investigare non oportebit. Hoc quoque non est oblivione pretereundum quod dicta arcus semidiurni cuiuspiam puncto ecliptice respondentis et semidiurni equinoctialis qui semper 90 graduum complementum semper est equalis immo eadem differentia ascensionalis

ad uni[illegible] punctum attinent. Differentie autem differentia ascensionalis arcus eclipticae
quo differunt due ascensiones, recta videlicet et obliqua eiusdem puncti eclipticae
sequentis. Declarationis exemplaris [illegible] [illegible] est [illegible] latitudine
48 graduum. Computatur arcus semidiurnus ad finem quindecimi gradus arietis
cuius declinatio est 4. 44. 54. huius declinationis complementum est 85. 15.
[illegible] [illegible] [illegible] [illegible] decimum problema erat. 8. 45. cuius complementum
81. 8. hec duo complementa mutuo ducantur in tabulam et [illegible] sermo
[illegible] generale. arcum 83. 53. quem demptum minime ex 90 gradibus
cum punctus datus in parte boreali consistit. relinquitur quod arcus semidiurnus
96. 56. quo duplicato crescit arcus diurnus 193. 52. Consimiliter autem arcus
[illegible] tabulam exceptus est. semidiurnus ad quindecimum librae ac
quindecimum piscium. cum illa duo puncta eundem eclipticae meridianum
possident. Postea si eundem arcum ex 90 gradibus absoluto relinquitur
differentia ascensionalis 6. 56. quindecimo gradui arietis attinens qui est
differentia ascensionis ad reliqua tria puncta spectantis quorum unumquodque
eundem gradibus ab altera sectionum eclipticae et equatoris remotum [illegible]
autem in hoc problemate de punctis eclipticae [illegible] aliis quoque [illegible]
[illegible] [illegible] stellis orientibus et occidentibus adaptare licebit. modo
declinationes eorum [illegible]. cum [illegible] [illegible] [illegible] supputantibus
diversitates inveniet [illegible]

## Problema undecimum

Quod precedens de punctis eclipticae pollicetur alia
ratione scrutari. Inveniendus primo est arcus semidiurnus
[illegible], inde videlicet capitulum respondens ex precedenti [illegible]
ex quadrante [illegible] semidiurno equinoctiali demendus est. [illegible] habetur
eorum differentia. que [illegible] differentia ceteris eclipticae punctis omnibus [illegible]
[illegible] sicut hoc pacto. intra latitudinem [illegible] ascensionum [illegible] arcus eclipticae
[illegible] punctum propositum et [illegible] et punctum equinoctiale [illegible]
[illegible] quod differentia semidiurni [illegible] semidiurni equinoctialis [illegible]
[illegible] differentiam semidiurnum quesitum et semidiurnum equinoctialis
quam differentiam ex quadrante arcus tollat si punctus datus in dimidia eclipticae
australi fuerit aut eidem superaddet si parte eclipticae aquilonari
possideat. sic enim arcus [illegible] semidiurnus quem duplicatum [illegible]
ipso diurno tenebis. Arcus autem diurno tempus quod diurnum addiscet
si per 15 gradibus [illegible] horas singulas [illegible] [illegible]
[illegible] arcus nocturnus et tempus [illegible] nocturnum [illegible] [illegible]. Rursus
si arcum semidiurnum in sex equas partes distribueris quantitatem hore
inequalis diurne videbis qua ex triginta demptis gradibus abla
ta partes hore nocturne remanebunt. Idem efficies si differentiam
semidiurni [illegible] et semidiurni equinoctialis in sex equas portiunculas
[illegible] et unam earum a quindecim gradibus dempseris pro australi
eclipticae semicirculo aut eidem adiunxeris pro reliquo semicirculo
boreali. Numerum autem quemlibet graduum et minutorum per senari
um dividere poteris breviter. hoc multiplica ipsum per 10 minuta
[illegible] propositi singulis numeris [illegible] singulas. verum ex gradibus
minutias primas. et ex minutiis primis secundas. et ita ex reli
quis reteras suo ordine nasci oportet. Redintegratis igitur ut
assolet fractionibus. habebis summulam multiplicationis quam
petebas. Porro in regione [illegible] cuius polus quinque et quadragin
ta gradibus supra orizontem extollitur differentiam semidi
urni cuiuslibet ac semidiurni equinoctialis celerius invenies si
intrabis tabulam [illegible] cum declinatione puncti propositi et cum

differentia ascensionalis

Arcus semidiurnus [illegible]

[illegible] hore [illegible] diurne et nocturne

fine

plemento eiusdem declinationis habebis cum e directo numeri arealis in
linea rubra descendenti differentiam quesitam cum qua deinceps ut antea proce
dendum erit. Hinc rei exemplum tale accomodabitur. Quere volo differentiam ascen
sionalem ad duodecim gradus geminorum in regione habente latitudinem 48.
8. graduum promo prius arcum semidiurnum minimorum ex precedenti [illegible] 61
quo dempto ex nonaginta gradibus relinquntur 28. 43 et tanta est
differentia semidiurni equinoctialis et semidiurni minimi id est differentia
ascensionalis maxima ad ecclipticam spectans. cum itaque cum 20. 29 ascensi
one salvet recta duodecim gradus geminorum mitto lateraliter in tabulam
et excipio differentiam ascensionalem 27. 4. que adiecta gradibus nonagin
ta arcum semidiurnum quesitum conflabit 117. 4. Iam ad latitudinem
47. graduum numerabis differentiam ascensionalem viginti gradus thauri
debitam. cetera cum que in medio tradita sunt supputatione non egent.
declinatio puncti claudentis vicesimum thauri gradum est 18. 41. 9 cuius
complementum 42. 12. 41 illis itaque duobus numeris areatim in tabulam
missis elicio differentiam ascensionalem quesitam 18. 43. qua deinceps uti
potero ad noticiam arcus semidiurni quantitatem quoque hore temporalis que
admodum antea monitum est. Problema quintumdecimum

## Diem longissimam in regione quapiam cogno veris. quopacto latitudinem eius invenias edocet

Quod per longissimam pollicemur, diem pari racione per bre
vissimam efficiemus, cum in hac opere differentia diei equinoctialis et
diei longissime rem ipsam plerumque absoluat. Quantum autem equinoctialis
dies vincitur a die solsticiali. tantum et ipse dies hyemalis vincit brumalem.
Huiusmodi itaque diei equinoctialis et diei longissimi differentiam di
midiatam in arcum paralelli sibi debitum converte, singulis horis e
qualibus quindenos ut solet assolet tribuendo gradus. eorum Deinde
graduum complementum cum complemento maxime obliquacionis sola
ris. lateraliter in tabulam ducito. nam quod in area corradetur. ex qua
drante sermonum relinquet amplitudinem ortus solsticialis an bru
malis. que rursus cum maxima excitabit maxima solis declinacione
in tabulam areatim missa. excitabit in latere rubro inclinacionem cir
culi equinoctialis ad orizontem regionis tue. eam itaque aufer ex nona
ginta gradibus. ut remaneat latitudo regionis quesita. Quod si lon
gitudo diei cuiuscumque data fuerit. sole a quatuor cardinibus remoto haud
difficulius perdisces elevacionem poli mundi. si non quidem maximam obli
quacionem sed quantam sol ex situ suo nanciscitur in usum accipies
Huius autem precepti tenor, numerorum serie declarabitur in hunc modum.
Offerat michi quispiam longissime diei spacium quindecim horarum
equalium. petat quoque sibi reddi latitudinem regionis ubi tanta dies ac
cidit. dies positus superat diem equinoctialem tribus horis equali
bus. quarum dimidium id est una hora cum triginta minutis. debetur
arcus paralelli. 22. 30. cuius itaque complementum 67. 30. cum com
plemento maxime declinacionis solaris 66. 30. lateraliter in tabulam
ducendo excipio 44. 4. cuius arcus complementum 32. 6. declarat
amplitudinem ortus solsticialis. quam rursus cum maxima declinatio
ne solari areatim in tabulam mittenti michi offertur elevacio equi
noctialis circuli 48. 38. ea deinceps ex nonaginta gradibus ab
lata. relinquit latitudinem regionis quesitam 41. 22.

Problema xv

## Cuiuslibet arcus ecliptice a sectione vernali incipientis ascensionem obliquam in regione quacunque dimetiri

Animadvertendum est primum punctum terminale huiusmodi arcus. quod si fuerit commune equatori et ecliptice necesse est arcum ecliptice fuisse semicircumferentiam et ascendere cum dimidio equinoctiali circulo. Si vero fuerit aliud quodcunque. reperienda est differentia ascensionalis tali puncto debita ex altero superiorum problematum, quam differentiam deinde ex ascensione recta propositi arcus si punctum eius terminale in dimidia ecliptica boreali repertum fuerit aut eidem adiunge, si in parte austrina extiterit, habebis enim sive ex subtractione reliquam sive ex additione collectam ascensionem obliquam arcus tui. Poteris itaque si libet in quacunque regione tabulam ascensionum obliquarum. itemque tabulam partium horarum temporalium et demum tabulam equandarum domorum secundum modum vulgatum de novo condere, nisi ingenio penitus rudi fueris. Et si arcus ecliptice non a sectione vernali sed aliunde sumentis initium ascensionem obliquam addiscere velis. cum ipse sit differentia duorum arcuum a sectione inchoatorum si utriusque eorum ascensionem obliquam modo predicto didiceris. alteramque ex altera dempseris. quod relinquitur ascensionem obliquam notificabit quesitam. Exempli gratia volo computare ascensionem obliquam ad duodecimum gradum geminorum in latitudine. 48. graduum. Ascensio eius recta a sectione vernali initium sumens. habet. 70. 29. ex qua minuo differentiam ascensionalem ei debitam. 24. 4. relinquuntur. 46. 25. tantam itaque invenio ascensionem obliquam arcui proposito respondentem. Eandem quoque differentiam ascensionalem si adiungero ascensioni recte duodecimi gradus sagittarii que est. 250. 29. consurgit ascensio obliqua eiusdem. 274. 33. Hunc itaque modum poteris componere tabulas ascensionum obliquarum ad quascunque datas latitudines. neque multis verbis hic opus esse reor. cum res ipsa sit facilis admodum. cognitis modo differentiis ascensionalibus ad unum quadrantem ecliptice spectantibus. nam illis ceteris quoque quadrantes accommodabuntur quemadmodum in abbreviato almagesti tradidimus.

Problema Sedecimum

## In omni regione. ex data ascensione obliqua ab altera sectionum inchoata. arcum ecliptice ei debitum investigare

Si habes tabulam ascensionum obliquarum ad eam regionem quam assumis. facile propositum absolvis. Si autem tabula huiusmodi apud te non est. neque novam fabricare iuvat hac parte procede. ascensionem obliquam propositam. deinde permitte quasi rectam consistere. et arcum ecliptice ei debitum ex antedictis aut aliunde disces. Hoc tamen attento quod ab eadem sectione vernali saliat aut autumpnali utreque ascensiones exordium sumant. puncti etiam terminantis huius arcum ecliptice declinationem addisce. item puncti huiusmodi distantiam a proxima sibi sectione. arcumque equatoris et in sphera recta coascendentem considera. Cum illis itaque duobus arcubus intra tabulam areatim. et numerum repertum in latere serva si punctus terminalis predictus fuerit immediate ecliptice descendenti que ab tauro incipiens ad capricornum per libram tendendo desinit aut numerum repertum ex semicirculo minue si fuerit in reliqua ecliptice medietate a quadam hac via offendes inventum primum vero

bis. Deinde intra tabulam lateraliter, cum altitudine poli et declinacione
puncti terminalis superius memorati, quodque in angulo communi occurrerit in-
ventum, solum appelletur. Postea intra tabulam areatim cum complemento
huius inventi secundi et complemento altitudinis poli, quodque in latere ru-
beo descendenti colliges, inventum tercium vocabis. quod ubi ex nonaginta primo
abstuleris, cum residuo et complemento inventi secundi tabulam lateraliter
ingredere, quodque reperies in angulo communi, deinde ex nonaginta gradi-
bus cum reliquo autem et cum invento secundo intra tabulam areatim
arcum quem in latere rubeo descendenti obtulerunt, illi arcui ecliptice, quem
in principio huius operis pro ascensione proposita tamquam certam elicuisti
apponas, si punctus terminalis predictus in dimidia ecliptica ascenden-
ti fuerit, aut ab eodem subtrahe si in reliqua, idest descendenti extiterit.
Habebis enim sive per addicionem sive per subtraccionem sicuti res ipsa horta-
tur quem querebas arcum ecliptice. Opus istud revera pulcrum est.
Quamquam prolixum. mihi tamen prolixius esse in vniverso visum est. tabulam
novam ascensionum obliquarum componere. ut per eam ascensioni obli-
que date arcum ecliptice debitum possemus agnoscere. Illud autem advertendum
operacionem huiusmodi servire duntaxat regionibus quarum
latitudines maximam solis declinacionem transcendunt. In ceteris cum
habitacionibus aliis quibusdam cautiunculis opus est. quas in presen-
narum silencio preterire decrevimus. cum peritos in usum venient [s[e]cu[n]da[m]]
ex facto abbreviati nostri, viro docto satisfacient. Si libet videre, exem-
plum pluriorum accipe tale. detur michi ascensio obliqua 232.36. cum
quantitate ecliptice arcus correspondeat in regione habente latitudinem
.48. graduum sit explorandum. Huic ascensioni tanquam certe con-
stitute, respondet quintus et vigesimus scorpii gradus cuius finis a se-
ctione autumpnali distat .44. gradibus qui quidem .44. gradus
deveniunt in spera recta cum .42.38. equatoris. mitto igitur .44. et
42.38. areatim in tabula, numerum quem solum prout priorem precepti
eliciam .16.0. quem vero inventum primum quoniam punctum ecliptice
claudens vigesimum quintum scorpii gradum est in dimidia ecliptice
descendenti. Deinde intra lateraliter cum altitudine poli .48. et decli-
nacione predicti puncti ecliptice que est .19.3.42. et eliciam inventum
solum .19.3. Huius inventi secundi complementum est .74.47. cum
quo et complemento altitudinis poli idest .42. intra tabulam areatim
numerum quem .42.37. hac via occurrentem vocabo inventum tercium
quo dempto ex inventu primo relinquitur numerus .32.23. quem cum
complemento inventi secundi si lateraliter immisero reperiam ut assolet
.31.16. Hunc numerum ex nonaginta aufero et restant .48.42. que
residuum numerum cum ipso invento secundo areatim tabule ingero re-
perio quem arcum .16.30. cum minos ex .24. gradibus scorpii et relinquun-
tur .8.30. eiusdem signi quibus videlicet ascensio obliqua proposita
respondet. Talis est operacio, ad quodcumque punctum signatum in quar-
ta ecliptice autumpnali, que vero ab inicio libre usque ad caput capri-
corni protenditur. Ad punctus autem reliquarum trium quartarum et si pau-
lo aliter agendum est, id tamen non nisi in addicionibus et subtraccionibus nu-
merorum, quemadmodum precipitur cuicumque soli, quorum ob rem aliam no-
va exemplari supputacione opus esse non arbitror. Problema xiiii

## Altitudinem solis supra orizontem existentis in omni regione omnique hora perpendere

Ad hoc propositum utimur distancia solis a meridiano.
que aut erit quadrans ad unguem. cum debentur sex hore equales
aut maior eo. aut minor. Si distancia a meridiano fuerit quadra-

Circuli intra lateraliter in elevacione poli et declinacione solis videlicet
cum in angulo communi altitudinem solis quesitam. Si autem memorata distan
cia quadrantem superaverit, eam ex dimidio circulo minue et residuum et
complemento altitudinis poli intra tabulam lateraliter, quod autem in angulo
communi offendes ex quadrante aufer, et residuum vocatur inventum pri
mum. Arcum quo deinceps invento primo ac latitudine regionis intra
tabulam arcatim. Et ex eo quod in latere rubro dependenti occurret com
plementum declinacionis solaris aufer, reliquum quod inventum
secundum vocato. Cum duobus itaque inventis primo scilicet et secundo
tabulam ingredere lateraliter, reperies cum in angulo communi altitudi
nem solis quesitam. Si distancia solis a meridiano minor qua
drante extiterit, intra cum ea et complemento altitudinis poli late
raliter quod autem in angulo communi accipies ex quadra circuli minue,
residuum quod ut ante fiat inventum primo nuncupabitur. Quod deinde in me
tum cum altitudine poli arcatim tabule immittas et complemento
cuius quod in latere dependenti occurret, adde solis declinacionem si
borealis fuerit, aut a dicto complemento minue declinacionem solis
si fuerit meridiana vel tale complementum seorsum serva si de
clinacione sol ipse careat. Quodque aliquo horum trium modorum
ut res exigit offeretur si non fuerit maius quadrante aut resi
duum eius de semicirculo si quadrantem superaverit inventum secun
dum nuncupabitur. Hec igitur duo inventa si lateraliter tabule immise
ris excipies in angulo communi altitudinem solis quesitam. Verum qua
do inventum secundum nonaginta precise gradus complectitur inventum
primum pro altitudine solis tenendum est. Gradibus autem intra pro
pinqua pro altitudine solis tenendum est. Gradibus autem intra pro
pinquiorum exequens, sole equinoctialem circulum possidente, intrabis
cum lateraliter cum duobus complementis, distante videlicet a meridie
et altitudinis poli, quod cum in angulo communi colligetur pro altitu
dine quesita accipies. Hoc spectabile preceptum, si recto consideres, non
parum, nisi me fallit animus, admiraberis. Eo namque ministro in qua
libet regione tabulam altitudinis solis ad omnes horas conficere
poteris, sive a meridiano sive ab orizonte horarum computaciones
feceris. Verum a meridiano autem numerando horas expediens
erit compositionem primum inventum ad unam et eandem horam
non variantur quamvis hora solis diversa atque ideo varias plerum
que eius declinaciones esse contingat. Similiter principium secundi
inventi ad eandem horam stabilo permanebit. Porro si condere li
beat tabulam altitudinis solaris, ab horas ab orizonte oportebit
simul scire arcum semidiurnum aut seminocturnum, ut inde agnoscatur
tur distancia solis a meridiano, que in presenti negocio sit cognitu
est necessaria. Quicquid autem de sole monuimus, aliis quoque stellis ac
punctis celi quibuslibet accommodare licebit, modo cognitas habeat
declinaciones. Exemplo sic accipe: sit sol in principio geminorum
distans a meridiano nonaginta gradibus paralelli sui, quibus de tempore
respondent sex hore equales. Volo inquirere altitudinem eius supra
orizontem cui polus extollitur 48 gradus. Declinacio solis est 20
12 8 cum qua et altitudine poli memorata lateraliter intro tabu
lam invenio quod arcum 12 42 quem dico esse altitudinem solis que
sitam. Rursus esto solis distancia a meridiano 104 graduum qui
bus septem hore equales debentur, subtraho 104 ex 180 relin
quuntur 76 cum quibus et complemento latitudinis regionis
scilicet 42 intro tabulam lateraliter et in angulo communi exibunt
minuta 20 14 41 46 quo minus ex nonaginta relictum autem
idest 69 45 2 vocabo inventum primum, quod deinceps cum
latitudine regionis 48 arcatim mitto in tabulam ex numero qui
elicito scilicet 22 2 demo complementum declinacionis solaris

distancia 90 graduum

distancia autem est 90 gradibus

numerandam ... sumpta ... ab orizonte

idest. 69. 28 secundum autem 1. 22. ubi inventum secundum. Cum duobus itaque
inventis primo scilicet et secundo ingrediar tabulam lateraliter et secundum pro
prium generale invenio. 4. 31. altitudinem solis quesitam. Item de
inde sol habeat distanciam a meridiano. 60. graduum quibus de
bentur quatuor hore equales quero elevacionem eius supra orizontem
intrando igitur tabulam lateraliter cum. 60. gradibus distancie a me
ridiano et. 22. gradibus complementi altitudinis poli angulus communis
prebet. 34. 22. 41. Huius arcus complementum est. 48. 34. quod inven
tum scilicet primum quod deinde inventum cum altitudine poli
28. areatim tabule immittendo colligo. 64. 27. cuius arcus com
plementum est. 25. 13. Cui addo declinacionem solis quemadmodum septen
trionalis est. 20. 12. et resultat inventum secundum. 45. 24. Illis ergo
duobus inventis lateraliter in tabulam missis elicio altitudinem solis
quesitam. 32. 26. Amplius sol in equatore constitutus habeat distanciam
a meridiano. 74. graduum. quibus debentur quinque hore equales. Vo
lo querere altitudinem eius supra orizontem perpendiculariter. quod
max efficiam ubi complementum latitudinis regionis. 22. lateraliter
tabule immisero nam in angulo communi afferetur latitudo solis que
sita. 9. 48. Si autem altitudinem solis agnoscere libeat ad aliquam ho
ram ab occasu solis computatam sit verbi gratia arcus semidiurnus
solis. 113. graduum per quem arcum videlicet sol occidens distat
a meridiano. instans autem occasus solaris est finis vigesime quarte
hore. quamobrem subtractis. 14. subtractum ex dicto arcu semidiurno re
linquitur distancia solis a meridiano. 98. 0. ad finem hore vigesime
tercie. Ex qua distancia si iterum abiecero. 14. gradus uni hore equali
debitos. relinquetur distancia solis a meridiano. 83. 0. ad finem hore
vigesime secunde et ita de ceteris usque ad finem hore septime de
cime. ~~secunde et ita~~ que habet distanciam solis a meridiano occi
dentalem. 8. graduum. quam distanciam minuo ex. 14. gradibus et
relinquitur distancia solis a meridiano orientalis ad finem sexte de
cime hore. scilicet. 7. graduum. Deinde per addicionem continuam quin
denarum graduum. procreantur singule distancie a meridiano ad
fines reliquarum horarum. per ordinem quemadmodum in margine
propinquo perpendere potes. Non aliter supposito eodem arcu semi
diurno. per solam subtractionem continuam quindenarium graduum
habeo distancias solis a meridie ad fines horarum ab ortu sola
ri computatarum. Verum numerus qui antehac hore vigesime ter
cie tribuebatur iam ad horam primam spectabit et qui tunc ho
re vigesime secunde nunc hore secunde atque ita de ceteris suo ordine
donec ad horam septimam venietur cui quidem respondebit distancia
solis a meridiano occidentalem orientalis. 8. graduum qui dempti ex
quindecim gradibus idest spacio horario relinquunt septem gradus fa
ciet distanciam solis a meridiano occidentalem ad horam octavam
Cui rursus distancie si addidero quindenarium numerorum concrescet
. 22. pro hora nona et ita procedendo per continuam addicionem
quindenarum graduum procreabo distancias solis a meridiano ad reli
quas horas per ordinem donec tandem per huiusmodi coacervacionem
colligetur numerus equalis arcui semidiurno aut proximo maior eo.
quorum uterque ab opere presenti reiciendus est. cum tales distancie
non accidant solari globo nisi aut occidenti aut iam sub orizontem
merso. Hactenus de horis equalibus nunc de temporalibus aut inequa
libus sit agam. Resumptum arcum semidiurnum quo antehac
usus sum in sex equas scindo porciunculas ut exeat quantitas
hore temporalis. 18. 40. quam servo pro distancia solis a meridi
ano ad horam quintam. duplum autem dicte distancie idest. 37. 20. pro

Margin notes: Cum distancia est hor. 90 — Cum sol est in equatore — Cum complementum distancie a meridiano [illegible] 44. — Ab occasu — Ab ortu

Distancia a meridiano (hore ab occasu)

| Hore | G | M |
|---|---|---|
| 24 | 113 | 0 |
| 23 | 98 | 0 |
| 22 | 83 | 0 |
| 21 | 68 | 0 |
| 20 | 53 | 0 |
| 19 | 38 | 0 |
| 18 | 23 | 0 |
| 17 | 8 | 0 |
| 16 | 7 | |
| 15 | 22 | 0 |
| 14 | 37 | 0 |
| 13 | 52 | 0 |
| 12 | 67 | 0 |
| 11 | 82 | 0 |
| 10 | 97 | 0 |
| 9 | 112 | 0 |
| 8 | 127 | 0 |

Occidentalis — Orientalis — Sub orizonte

Distancia a meridiano (hore ab ortu)

| Hore | G | M |
|---|---|---|
| 0 | 113 | 0 |
| 1 | 98 | 0 |
| 2 | 83 | 0 |
| 3 | 68 | 0 |
| 4 | 53 | 0 |
| 5 | 38 | 0 |
| 6 | 23 | 0 |
| 7 | 8 | 0 |
| 8 | 7 | 0 |
| 9 | 22 | 0 |
| 10 | 37 | 0 |
| 11 | 52 | 0 |
| 12 | 67 | 0 |
| 13 | 82 | 0 |
| 14 | 97 | 0 |
| 15 | 112 | 0 |
| 16 | 127 | 0 |

Orientalis — Occidentalis

hora quarta triplum eius 46. 30. ad horam terciam quadruplum soli
tet 74. 20. ad horam secundam quintuplum autem 9. 8. 10. ad horam
primam. Hec sunt hore ante meridiane quarum quelibet sua com
pari post meridiana equalem soli tribuit altitudinem. Nam sicuti
finis hore sexte solem ab orizonte plurimum remouet ita hora quin
ta quidem et septima equas solis altitudines exhibent quarta autem
et octaue horarum fines pares solem inequaliter ab orizonte remouere
non sinunt haud dissimilem denique passionem soli accidere necesse est
ad fines reliquarum horarum parilium. Cognitis ergo distanciis solaribus
a meridiano si vestigia supputacionis superius exposite secutus fue
ris voluntatem tuam prouidebis tranquillam reddes. xviiij

## Sole in aliquo signorum borealium existente altitudinem eius in circulo verticali explorare

Circulum verticalem diffinimus eum qui per verticem capitis

Circulus verticalis

productus ad oriens equinoctiale atque occidens utrimque extenditur. Est autem
oriens equinoctiale ubi orizon et equinoctialis circulus secat in par
te orientis a quo videlicet amplitudo ortus numerari solet. Occidens ve
ro equinoctiale per diametrum ei opponitur unde et amplitudo occa
sualis inicium sumit. Intra igitur arcuatim cum altitudine poli et solis
declinacione boreali. Nam quod e directo numeri arealis in latere rubro
descendenti reperietur altitudinem prebebit quesitam. Exemplariter
autem intelliges volo pone huiusmodi altitudinem solis in principio
geminorum existentis ad latitudinem 48 graduum declinacio solis
est 20. 12. cum qua et latitudine regionis ingredior tabulam are
alem invenio quod secundum preceptum generale altitudinem solis
quesitam 27. 51.

Problema decimumnonum

## Distanciam solis orizontalem a circulo verticali cognoscere

Huiusmodi distanciam plerique vocant

Azimuth

arabico nomine azimuth. Est autem arcus orizontis intercluse
duobus circulis magnis per verticem capitis euntibus, quarum alter quidem
per oriens equinoctiale et occidens incedit quem antea circulum ver
ticalem agnominauimus, alter autem globum solarem secat per me
dium. Nam nulli denique distanciam talem ad meridianum utrimque re
ferunt que res propositum nostrum haud quaquam interturbabit.
Cum meridianus circulo verticali ad rectos incidat angulos atque orizon
ta quatuor quadrantes cum eo intercipiant de orizonte. Eius fu[i]t
cognita tali remocione solis a circulo verticali, distancia quoque ab
ipso meridiano non ignoretur. Intra itaque lateraliter cum comple
mento declinacionis solaris et distancia eius a meridiano quadam
in angulo communi occurret seruato. Secunde tabulam arealem ingre
dere cum eo quod seruasti de complemento altitudinis solis quod
cum in latere rubro descendenti reperies ex nonaginta gradibus dem
ptum relinquet distanciam orizontalem a circulo verticali quam pre
bebis meridianam quidem semper dum sol per signa austrina decurrit
lat. borealem autem si in parte superiori aquilonia consistat altitudinem
quam habeat minorem ea quam circulus verticalis soli exhibet. Nam si
talis altitudo qua in suinus in opere presenti superauerit altitudinem so
lis in circulo verticali, distancia sepe memorata adhuc meridiana de
nominabitur, tamen et si semicirculus ecliptice septentrionarius solari
lumine illustretur. Si altitudo solis ad opus proposituum exercita alti
tudinem eius in circulo verticali equauerit. Ubi eadem fuerit nulla
erit orizontalis distancia a circulo verticali. Altitudinem autem solis in
circulo verticali precedens problema notam reddidit. Arcum solis e
quinoctialem possidente circulum. longe facilius hanc huiusmodi ex
palmis distanciam, intrabimus cum tabulam arealem cum complo

Mento altitudinis solaris et distancia a meridiano quadagis in latere rubro descendenti e directo numeri arcalis reperietur ex nonaginta gradibus demissum relinquit distanciam orizontalem quesitam. Quocies autem meridianum ipsum sol occupaverit, arcus talis nonaginta gradus comple bitur. Sed memento distanciam solis a meridiano qua utimur in absolu cione problematis non per ecclipticam verum per equinoctialem aut ei eque distantem circulum sumi oportere, cum solent que singulis horis equalibus quindenos tribuit gradus. Postremo quecumque ad solem hactenus relata sunt aliis quoque stellis ac celi punctis quibuslibet accomodare licebit, modo non ignorentur que ad introitum tabule sunt necessaria. Iam exempla sit ut prius sol in principio geminorum a meridiano remotus ad orientem gradibus 60, qui debentur horis qua tuor equalibus ... idcirco in latitudine 48 graduum sive supra orizontem elevatur gradibus 32 et minutis 26. Intro latitudinem cum 69. 28. idest complemento declinacionis solaris et 60 gradibus distancie a meridiano numerum ... hac via repertum 49. 22 cum com plemento altitudinis solaris 47. 14 arcualem in tabulam mitto et nu merum lateris rubri ut assolet occurrentem 81. 39. ex quadrante idest nonaginta gradibus minuo ut relinquatur arcus quesitus 8. 21. XX

## Angulum ex concidencia ecliptice et meridiani qui apud quodlibet ipsius ecliptice punctum provenit investigare

Angulum ipsum huiusmodi borealem et orientalem duntaxat invenire docebimus, ex quo demum reliqui tres, qui iuxta quodvis ecliptice punctum constituuntur, innote scunt. Intra itaque arealem cum complementis duarum declinacionum quarum una est maxima, altera vero debetur puncto proposito, et habebis in latere rubro descendenti angulum quesitum si punctus in semicirculo ecliptice ascendenti signatus fuerit. Si autem in semicircu lo altero propositum fuerit, arcum inventum ex semicircumferencia mi nuas ut relinquatur magnitudo anguli quesiti. Apud puncta vero tro pica angulum huiusmodi rectum esse oportet. Sed iuxta vernale pun ctum angulus ille complemento maxime declinacionis solaris e quatur, apud autumpnale autem recto et angulo maxime declinacionis solis respondente constituitur. Aliter denique problema presens ab solvendi dabitur facultas. Si intraveris arealem cum distancia puncti da ti ab alterutro punctorum equinoctialium eo videlicet cui vicinior fuerit et cum ascensione recta eidem arcui debita id cuius in latere rubro descendenti occurrit aut residuum eius de semicirculo uti supe rius traditum est pro angulo quesito tenebis. Exempli gracia que ro angulum huiusmodi apud finem vicesimi gradus thauri constitutum. Declinacio memorati puncti est 15. 32. cuius complementum 74. 28. De clinacio solis maxima est 23. 30. cuius complementum 66. 30. Hec duo complementa mittendo arealem in tabulam elicio angulum quesitum 71. 21. fere. Huiusmodi autem angulus apud principium arietis com pletur 66. 30. quo quidem numero quadrans circuli superat maxi mam solis declinacionem. Apud cancri autem caput angulus talis habet 90 gradus et iuxta initium libre 113. 30 quemquidem numerum maxima solis declinacio efficit adiecta quadranti. Si cum distancia puncti dati a capite arietis idest 39 gradibus et ascensione recta ei respondente que est 36. 36. arealem tabulam ingressus fuero eundem quem prius angulum meridiani et ecliptice reperiam XXI

## Angulum ex concursu ecliptice et orizontis pro creatum indagare

Intra arealem cum complemen to declinacionis puncti propositi et elevacione poli borealis in tua

regione habebis cum in latere descendenti numerum quendam qui ubi ex angulo meridiani et ecliptice apud punctum propositum existente, subtractus fuerit quantitatem anguli quesiti relinquit. Apud sectionem autem vernalem si maximam solis declinationem ex complemento altitudinis poli dempseris, aut eidem adiunxeris, apud punctum autumpnale, magnitudinem anguli quesiti apud illud punctum invenies. Hec quidem referenda sunt ad partem orizontis orientalem. Nam in orizonte occiduo si huiusmodi angulum investigare libeat, presciendum est quod duo tales anguli apud puncta ecliptice per diametrum opposita provenientes, quorum alter quidem in oriente alter autem in occidente eodem temporis instanti fiunt, duobus rectis equipollent coniunctim. quamobrem parenti huiusmodi angulum occidentalem, querendus est angulus qui accidit iuxta punctum oppositum in oriente. is cum subtractus a duobus rectis idest ·180· gradibus, relinquit angulum quesitum in occidente. Verum si libeat ex hac tabula angulum talem qui in occidente fit addiscere, intra areatim cum altitudine poli et complemento declinationis puncti dati. quodque in latere rubro descendenti reperies adde angulo meridiani ecliptice apud dictum idem punctum provenienti ut concrescat huiusmodi angulus quesitus. Porro apud punctum equinoctij vernalis quidem poli elevationem in tua regione quadranti adiungas et ex collecto maximam solis declinationem auferas. Apud punctum vero equinoctij autumpnalis eandem maximam declinationem solis ipsi collecto addicias et proveniet angulus quem querebas in occidente. Poteris denique huiusmodi angulum orizontis et ecliptice in oriente provenientem, aliter explorare, intrando lateraliter cum complemento altitudinis meridiane medij celi supraterranei, et angulo quem continet meridianus cum ipsa ecliptica apud tale medium celi, si non fuerit maior recto idest nonaginta gradibus, aut cum eius residuo de semicirculo si rectum superaverit. numerus enim quem dabit area ex quadra circuli, relinquit quantitatem anguli quesiti. Huius negotij exemplum accipe. Libeat supputare angulum orientalem huiusmodi apud terminum noni gradus tauri accidentem in ea regione ubi polus septentrionalis ·48· gradibus extollitur. Declinatio aquilonia memorati termini est ·15·32· min. complementum ·74·28·. Duos itaque numeros ·74·28· et ·48· intro areatim in tabulam quemadmodum precipit, numerumque elicitum ·40·9· demo ex angulo meridiani et ecliptice inventione ·71·21· ut relinquatur angulus quesitus ·31·12· et ·o·22· gradibus idest complementum declinationis polaris. Duo tales anguli apud initia arietis et libre nascuntur ille quidem vernalis ·18·30· per ademptionem declinationis polaris maxime, iste autem ·64·30· per adiectionem eiusdem maxime declinationis. Nam demum angulus talis apud nonum scorpij gradum accidentem. Exempli gratia queratur angulum prius dictum ·31·12· qui respicit ad nonum tauri orientis gradum spectat. Demo ex ·180· gradibus quos duo recti anguli complectuntur, et restant ·148·48· aut numerus ille ·40·9· ex tabula per arealem introitum intra ad nonum tauri gradum depromptus, qui ad nonum quoque scorpij gradum spectat propter equales elevationes et ibi declinationes. Adiungatur huic ·108·39· angulos scilicet meridiani et ecliptice apud nonum scorpij, fit item conflabis ·148·48· magnitudinem anguli quesiti.

35. li. ij Epitomae

## Problema XXII

Varietatem anguli ex ecliptica et circulo altitudinis provenientis addiscere. Ad hoc negotium necessaria est ea distantia puncti dati a meridiano, que per equinoctialem aut ei eque distantem circulum in quo est punctus datus

perpenditur, pro singulis horis equalibus quindecim accipiendo gradus
Intra itaque lateraliter cum tali distantia puncti dati a meridiano sive supra
terram sive sub terra, ea videlicet distantia que non excedit quadrantem
circuli, et cum complemento altitudinis poli, quodque in angulo communi oc-
curret, cum complemento altitudinis puncti dati arcuatim denuo tabule im-
mittas, habebis enim in latere rubro descendenti angulum quemdam circuli
altitudinis et circulo per polos mundi et punctum datum incedente contentum.
Quem igitur angulum adiunge angulo meridiani et ecliptice apud dictum
punctum provenienti, si punctus ille de quo agitur ante meridianum si-
tus fuerit, aut minue ab eodem si meridianum transierit, habebis enim vel
addendo vel subtrahendo, prout res ipsa postulat, angulum quesitum. Fa-
ciliter itaque ex hiis que commemoravimus, tabulas angulorum in om-
nibus regionibus conficies, neque oportebit pro una et eadem distantia a
meridiano nisi semel intrare tabulam lateraliter pro primo videlicet
puncto, quamvis complura talia puncta fuerint assignata. De hiis in par-
ticularium tabularum compositionibus, ne paulo liberius evagari videamur
sermonis finem faciamus. Ut exemplari supputatione rem intellectu
faciliorem reddamus, in latitudine 48 graduum ponatur initium signi
geminorum ante meridianum per 2 horas equales, quibus de equatore
aut parallelo debentur triginta gradus. 60 complementum latitudinis re-
gionis est 42. elevatio autem principii geminorum supra orizontem
est 36.26 cuius complementum 44.12. duobus itaque numeris 60 et 42
lateraliter in tabulam immissis excipies in area ut assolet 34.24 quem de-
inde numerum cum complemento id est 44.12 arcuatim in tabulam duc
et iuxta principium generale elicies 48.42 angulum videlicet quem
circulus altitudinis et circulus per polos mundi cadentes apud punctum
datum complectuntur. Huic itaque angulum adiunge angulo meridiani
et ecliptice iuxta memoratum punctum procreato qui per problema
vicesimum fuit 83.77.26 ut conficiatur angulus quesitus 122.38.
quoniam punctus datus in parte orientali positus est qui si occi-
dentem versus penderet minui oporteret eum numerum qui tamen
nunc adiungebatur

Problema vicesimum tercium

# Quod precedens pollicetur, aliter comprehendere

Rem in hoc opere, notitia cardinis regii est necessaria, que
cum sit pervulgata plurimum, speciali explanatione stimu-
lo non eget. Intra igitur lateraliter cum complemento altitudinis
meridiane puncti ecliptice, qui in medio celi est, et cum angulo quem
meridianus atque ecliptica apud idem punctum ambiunt, si non fuerit
maior 90 gradibus, nam si maior eisdem occurrerit, eo dempto ex
180 gradibus, cum reliquo agendum esset. quodque in angulo communi
offeretur, declinabit quantum nonagesimus gradus ab ascendente, distat
a vertice emisperii superioris. Eam itaque distantiam cum complemento
altitudinis puncti dati, arcuatim in tabulam mittas, quod enim in latere
rubro descendenti reperies magnitudinem anguli quesiti manifestabit
si punctus propositus meridianum iam transierit. Nam si non dum
meridianum attigerit, quod per tabulam cardinum est ex semicirculari
eum minuas, ut relinquatur angulus quem desiderabas. Multe deinceps
cautele circa negocium presens exponende essent, verum dum pun-
ctus huiusmodi ad aquilonem portionis ecliptice orientalis, qui in
meridiano iacet, ad austrum recedit a vertice capitum. Et quando
punctus huiusmodi ad aquilonem vergit, quid facto opus sit mo-
nendum esset, nisi raro operis dissuaderet, quas quidem et alias
insuper conditiones alibi sanius lucubravimus. Exemplum presentis.
Sunt ut puta gemini a meridiano remoti orientem versus per 2
horas equales, petatque aliquis angulum a circulo altitudinis com-

et ecliptica comprehensum, medium celi tunc erat 21 36 piscium, cuius altitudo meridiana 21 3 [illegible] altitudinis complementum est 28 47. angulus autem meridiani et ecliptice apud tale celi medium per [illegible] [illegible] eliciti 66 32 quem una cum elongatione medii celi a vertice capitum que erat 28 47 mitto lateraliter in tabulam [illegible] [illegible] exeuntur remotio nonagesimi a vertice capitum 32 26 verum altitudo puncti initialis geminorum est 32 26 cuius complementum 44 12 tum remotionem nonagesimi a vertice arealem transfero in tabulam et [illegible] [illegible] [illegible] 47 22 [illegible] numerum aufero ex 180 gradibus quoniam punctus datus quadrantem ecliptice orientalem possidet relictus [illegible] numerus 132 38 magnitudinem anguli quesiti perulgabit

## Problema xxiiii

## Angulum nuperrime tractatum alia ratione scrutari

[illegible] [illegible], [illegible] [illegible] medio celi [illegible] [illegible], [illegible] [illegible] puncto orientis aut occidentis [illegible] cum [illegible] anguli quesiti, varia sit magnitudo, cum alio et alio puncti [illegible] [illegible], [illegible] est punctus ecliptice orientalis, eo instanti quo [illegible] angulus ex [illegible] ecliptice et [illegible] altitudinis [illegible]. [illegible] inventionem [illegible] [illegible] [illegible] est [illegible] [illegible] [illegible] fuit. Intra igitur arealem, cum distantia puncti dati a puncto orientis aut occidentis, ea videlicet que inter [illegible] [illegible] [illegible], et cum altitudine eiusdem puncti supra orizontem, tunc quod in latere [illegible] descendente [illegible] quantitatem anguli ex ecliptica et orizonte [illegible] [illegible]. [illegible] ergo angulum ex nonaginta gradibus deme, cum [illegible] aut [illegible] complemento altitudinis puncti dati ingrediaris tabulam [illegible] arealem. et quod in latere [illegible] descendente videbis ex 180 gradibus subtrahas si punctus datus puncto orientis [illegible] fuerit quam puncto occidentis. [illegible] pro quantitate anguli quesiti [illegible] [illegible] puncto ecliptice occidentali magis appropinquaverit [illegible] [illegible] pro angulo quesito [illegible] punctus [illegible] [illegible] equaliter ab oriente atque occidente remotus angulum apud se quesitum [illegible] esse rectum [illegible] [illegible] [illegible] exemplum [illegible]. [illegible] [illegible] [illegible] geminorum [illegible] [illegible] [illegible] orientem [illegible] [illegible] quatuor horarum equalium [illegible] gradibus 60 [illegible] [illegible]. habebit altitudinem 32 26. horoscopus igitur habebit 22 [illegible] [illegible] est 42 11 [illegible] [illegible] [illegible] 11 [illegible]. cum [illegible] puncti dati [illegible] [illegible] [illegible] tabulam cum altitudine memorata puncti dati et [illegible] [illegible] magnitudinem scilicet anguli orientalis que [illegible] [illegible] [illegible] 26 12 [illegible] [illegible] [illegible] [illegible] ex 90 restabit complementum [illegible] orizon cum ecliptica [illegible] anguli 63 28. est autem complementum altitudinis puncti dati 44 12 [illegible] utraque duo complementa arealem tabule illata [illegible] 42 29 quem aufero ex gradibus 180 et relinquitur 137 56 [illegible] [illegible] [illegible] angulum. [illegible] [illegible] angulum [illegible] [illegible] [illegible] [illegible] numerum 132 38 [illegible], maiorem quam [illegible] [illegible] [illegible] minoris [illegible] [illegible] [illegible] discordantiam videri debet. [illegible] [illegible] [illegible] ad [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] supputationes non [illegible] [illegible] sed [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] in [illegible] minoribus [illegible] [illegible] oportet et [illegible] [illegible] [illegible] [illegible] [illegible] nullius momenti [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] sensibiles [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] quemadmodum in [illegible] huius operis [illegible]

## xxv

## Gradum ascendentem, aut punctum ecliptice orientale, in omni regione et hora omni per hanc tabulam investigare

[illegible] [illegible] [illegible] [illegible] nonaginta [illegible] celi, et sue altitudinis meridiane, [illegible] [illegible] quo [illegible] [illegible] [illegible] [illegible] [illegible] esse [illegible] Intra igitur arealem [illegible]

cum angulo ex gradibus circuli ecliptice apud medium celi provenientibus aut cum residuo eius de 180 gradibus si angulus ipse recto maior fuerit et cum complemento altitudinis meridiane eiusdem puncti, quod quidem in latere descendentium offendes erit distancia qua nonagesimus gradus ab ascendente, eiusque ex compartim superioribus distinguitur, cuius distancie complementum est altitudine meridiana medii celi. Arcuum sursum in tabulam [illegible] quod quidem in latere subtus descendentium occurrit. Sumpto eciam arcu ecliptice ad medium celi depressionem auferas, si ipsum celi medium in dimidio ecliptice ascendente fuerit et relinquitur arcus ecliptice ad accidentem terminatus, ipso opposito ascendentis eciam cum per diametrum opponitur non latebit. Aut huiusmodi spacium medio celi superadde si ipsum celi medium in semicirculo ecliptice descendente extiterit, sub eodem cautela supputacio ad occidentem ecliptice supputacionem ad sectionem te reducet. Que quidem ascendentis gradus punctum quantulacunque perquisite, quamvis aut solsticiali aut brumali medium regni possidente horoscopus sponte quasi agnoscendus sese prebet. Dum hoc capitur summum in speculamine supra terram deponit extrema [illegible] [illegible] inventum intelligit. Cancro aut ad medium regni anhelante, capricornus supra orizontem postremo relinquitur. Quorum omnium exemplare supputacio admetienda videtur. Ponat quispiam primum [illegible] gradum [illegible] in medio celi, inde quod posset sibi [illegible] horoscopum in regione habente latitudinem 48 graduum. Altitudo meridiana medii celi est 22 gradus cuius complementum 67 minuta 20, angulus meridianus ecliptice apud medium celi est 68 minuta 11, quibus ex vicesimo huius habentur, que quidem angulus cum dicto complemento altitudinis meridiane medii celi 67·20 ... latere in tabulam ex septimo [illegible] datum 44·2, tantum quod est [illegible] semicirculi ecliptice circa hemisperium superius huius eciam quod complementum 28·51 cum [illegible] altitudinis meridiane medii celi arcuum in tabulam [illegible] [illegible] offertur arcus 30 ·2· quem demo ex arcu ad medium celi descripto et relinquitur 4·48 [illegible] in medio ordine que [illegible] per [illegible] [illegible] [illegible] 4·48 cancri in ascendente.

XXVII

# Qui ascendentem in regione qualibet habuerit quo pacto medium celi investiget manuducere

Tercio astronomo difficile videri debet ex ascendente dato medium celi comprehendere si tabulam ascensionum obliquarum ad regionem sitam habuerit. Quod si aut in promptam aliquam huiusmodi tabula obliquarum ascensionum subtrahere illud inquirentem hac via: Ex demo [illegible] amplitudinem ortiva ascendente [illegible], et ex vicesimo primo angulus quem ab orizonte ecliptica apud punctum orientis contineri addisceremus. Deinde latera introiremus tabulam cum dicta amplitudine ortiva prefati quod anguli quantitate et quod in angulo quem habet ex quadrante abiceremus cum residuo aut et cum complemento amplitudinis ortive ascendentis arcum sursum tabula ingrediemur quod quidem in latere subtus descendentium occurreret, ex arcu ecliptice ad punctum occidentis terminato minueremus si punctus ipse orientis fuerit in semicirculo ecliptice austrino, aut adderemus eidem arcum ecliptice ad punctum orientis terminato si partem ecliptice aquilonarem possideat punctum oriente. Sic enim haberemus arcum ecliptice cuius terminus in meridiano supra terram reperiatur. Porro sicut ariete ascendente capricornus regnum occupat medium, ita sinico libre ascendente caput cancri in meridiano absque ulla sinuosa supputacione invenietur. Patet eciam aliud idem explorari ex quindecimo enim huius ascensio obliqua arcus ecliptice qui ad punctum orientis desinit sciretur. Dempta igitur quadrata circuli ex huiusmodi ascensione obliqua, relinquetur ascensio recta arcus ecliptice terminati ad punctum quod in medio celi persistit [illegible] et ipsum celi medium exemplo innotesceret. Exemplari aut calculo [illegible] [illegible]

In regione vero polus borealis eo gradibus extollitur sit exaltatus 14. v. gradus liberet quod per eum ingnaite medium celi abscisso illa ascensionum obliquarum tabula ortiua amplitudo puncti orientis est. 8. 42. Borealis angulus aut ambitus ex orizonte et ecliptica apud finem quindecimi gradus arietis premeuntur est. 18. 45. quem vna cum amplitudine ortiua mediata latitudinali mitto in tabulam colligo quod altum. 2. 41. cum deinde complementum 87. 9. complemento amplitudinis ortiue. 81. 8. arcuum tabule inferendo elicio. 81. 34. hunc numerum adde arcui ecliptice ad orizontem ordinati distincti vero 14. gradus. [illegible]. arcus itaque ex huiusmodi additione crescens proueniet ad medium celi quesitum eritque gradus sex et minuta. 54. capricorni. xxvij.

In omni regione eleuationem solis supra orizonte quamque hora data aliter quam superius dinumerare

Aliter quam possumus. quod paulo difficilius, ne in hoc vna relinqueretur ignota. iusto ordine per medium celi et ascendentis notitiam aperienda videbatur. Nam et ille due res ad propositum nostri cognitione necessarie sunt. Intra itaque arcuum cum distantia medii celi ab oriente aut occidentis puncto vera videlicet eorum numero fuerint et cum altitudine meridiana medii celi quadrans in latere rubeo colligetur. Demum laterali tabule mittatur cum distantia loci solaris ab oriente vel occidente reperies eum in angulo quam altitudinem solis quesitam. Est si minus cum circa aut seu in medio celi fuerit. mittatur arcuum cum altitudine eius meridiana quam distantia solis ab oriente vel occidente. angulus itaque quam quesita perhibit altitudinem. Exemplificare repetimus quintumdecimum arietis gradum terram orientem et medium celi ex eo cognitum. 6. 54. cap. sit quod circa interesse medii altitudinem solis in principio. 3. persentitur. Altitudo meridiana medii celi est. 18. 20. distantia autem eius a radice oriente. 81. 54. hos duos numeros iuxta preceptum arcuum transferendo in tabulam prendo. 18. 45. quam deinde cum numerum cum distantia solis ab ascendente que est gradus. 24. mitto laterali in tabulam et in angulo quam vt assolet offendo altitudinem solis quesitam. 15. 12. Illud denique haud silendum quamque superius propositum est rerum. numerum ex arcuum introitu elicitis. quam erat. 18. 45. declarare angulum omnem angulum arcuum ab orizonte et ecliptica gradus cum superpositionem supra alia quamque lege reddimus in problemate superiori primo. vna igitur operandum amplectenda malis. penes te situm erit. Nunc ad aliud promissum problematum transeat liber. quo ambidiens amplitude tabule nostre demonstretur. xxviij.

Arcum orizontis quem abscindit ex eo circulus horarius deprehendere. Circulos horarios hic voco distinctos horarum vnder ipso innitam [illegible]. plurimum autem eos submittuntur horarum que a meridie aut a noctis medio numerari solent. Illi vero circuli quos diximus. maximi sunt in spera et per polos mundi circa quos motus primus regulariter mouetur. Quem denique furcam afferat arcus orizontis huiusmodi. quos querimus. libenter intelliges si vnquam solarium fabricandis delectaris. de quibus cum instrumenta astronomica partibusque differendi copia dabitur. Intra ergo lateralem primum distantia circuli horarum a meridiano. et complemento altitudinis poli quadrans in angulo quam currit ex quadra circuli demum cum reliquo autem et complemento distancie a meridie intra tabulam arcuum quod eum in latere rubeo descendentem colligentur ex. 90. gradibus ablatis relinquet arcum orizontis quesitum qui includitur inter circulum horarium de quo agitur et meridianum ipsius quanticunque. Per distantiam autem circuli horarum a meridiano. arcum equinoctialis circuli accipe, qui inter meridianum et talem horarium circulum comprehenditur. In hoc denique opere. nunquam vltra quadrantem prodire debes. Nam et pene ipsum momento vtitur quanta et propria hore per medii accepte. equalis scilicet arcus orizontalis similiter quarta et octaua atque in huius modi ceteris hore equalitate a meridie et medio noctis recte

Circulus horarius

Verumtamen arcus orizontales horarum ad meridiem vergencium a meridiano supra terram perpendi debent. Arcum vero que ad mediam noctem tendunt spacia orizontalia a puncto anguli oriens sunt numeranda. Postea hore equales a meridie ortumque distantes equos sibi vendicant arcus orizontales a puncto meridiei ad ortumque [illegible] [illegible]. In [illegible] orizontem planis interesse quoque ad absolucionem problematis attinent, [illegible] super paratum orizontis semidie hore orbium qui quidem intermedium et circulum hore semidie claudunt in regione cum polo septemtrionalis octo et 40 gradibus extollitur iuxta tenorem igitur precepti. 42. gradus idest complementum elevacionis polaris et 30 gradus scilicet distancia a meridiano latitudine in tabula reducens inde offertur in area tabule numerus ille 19. 53. cuius complementum 10. 21. in complemento distancie a meridiano idest 60. gradibus arearum tabule inferens extrahe arcum 68. 28. huius demum complementum scilicet 21. 32. magnitudinem arcus quesiti manifestabit XXIV

## Arcum circuli verticalis quem horarius quilibet ex eo secat circulus invenire

Quemadmodum precedens ad orizontalia ita presens ad muralia pertinebit solaria. Intra ergo latera cum distancia circuli horarii a meridie, et altitudine poli quod est in angulo qui obviabit ex quadrante communis cum residuo aut et complemento distancie a meridie intra tabulam arearum habebis namque latere subtus descendens arcum cuius complementum ostendit arcum quesitum. Exemplum huius problematis tale damus. libet investigare arcum huiusmodi hore secunde sequentem. altitudinem ergo poli 48. 0. min 30. 0. distanciam vero a meridiano mitto latitudine in tabula et e regione offertur inde numerus ille in area tabule 21. 29. cuius demerens complementum 68. 11. cum 60. 0. idest complemento distancie a meridiano arearum in tabula quero offendo quod sit arcum expositum 68. 42. cuius complementum 21. 6. pronto arcum quesitum. Tantum quoque valet angulum contentum a linea meridiana et linea hore secunde in plano secante ea ortum quod orizontem ad rectos angulos. quales sunt parietes domorum super orizontis perpendiculariter innitentes. atque earum rectissima sunt appositis. Hoc animadvertendum est quod non iniocunda altercatio [illegible] arcum horariorum in quibuslibet duabus regionibus quarum latitudines composite summam graduum nonaginta reddunt. Nam arcus orizontales unius earum regionum sunt equales arcubus muralibus alterius regionis et econverso de arcubus loquor ad easdem horas pertinentibus. Verbigracia in latitudine 48 graduum arcus orizontalis hore tercie equalis est arcui murali hore tercie in latitudine 42 graduum. Duo quippe numeri predicti latitudinum 48. et 42. graduum quadrantem circuli constituunt. Non aliter de aliis quibuscumque latitudinibus atque horis equaliter a meridie remotis existimabimus. Quo demum fieri non est ut in latitudine 45 graduum arcus orizontales ab arcubus muralibus horarum pariter haud quaquam discrepent. Cum nullus sit numerus alius qui continens 45 gradibus quadrantem circuli compleat preterquam ipsemet numerus 45 graduum. Sane verticalis nominis observatorem innuat quod arcus muralis ac arcus circuli verticalis qui inter meridianum et circulos horarios quoslibet continentur. Is namque circulus verticalis instar parietis aut muri est ad austrum recte appositi XXV.



## Angulos horarios in plano super meridianum quidem erecto, ad orizontem autem inclinato describere

Talia sunt domorum tecta plana ad meridiem directe respiciencia. Angulos autem horarios vocamus eos qui continentur a lineis horariis quod quidem sunt communes sectiones plani angulique et circulorum horariorum qui scilicet per polos mundi transeunt ordinatos quod equatoris gradus includunt. Primum hoc supponimus quod axis mundi pertranseat planum taliter ita quod omnes linee horarie conveniunt in uno et eodem puncto cum videlicet omnique axis mundi penetrabit. quod quamquam in veritate non ita subsistat cum plana apud nos existencia non sunt in medio mundi sed tamen quod [illegible]

centrum mundi quod quidem in ipso axe situm est cum sit semidiameter terre pene
insensibilem habens quantitatem respectu semidiametri spere solaris linee ho-
rarie in locis nunc descripte eosdem ipse complectunt angulos quos continent si
planum quodlibet in medio mundi statuerit. Et de hiis alius planis
differentie. Considerare itaque debes elevationem alterius poli mundi super
planum propositum deinde per omnia procede sicut in precedenti problemate.
Huiusmodi autem elevationem poli habebis si altitudinem poli in regione
tua subtraxeris ab inclinatione plani ad orizontem tuum vel econtra inclinationem
plani ab altitudine poli et hoc quidem verum est dum inclinatio plani
tendit ad eam partem respectu puncti verticalis versus quam polus mundi septen-
trionalis respicit. Sed si inclinatio plani fuerit ad partem meridionalem minor
aut equalis inclinatione equatoris complementum huius inclinationis complemento
altitudinis poli adiungendum est. Si autem inclinatio plani maior fuerit
inclinatione equatoris ipsa adiungenda est altitudini poli et [illegible]
elevatio poli supra planum datum. Et si inclinatio plani equalis fuerit
inclinationi equatoris elevatio poli utriusque super planum datum erit
90 graduum singuli autem horarum anguli quindecim suscipient gradus. At si in-
clinatio plani ad septentriones tendat equalis que sit altitudini poli
in tua regione nullus erit angulus horarius verum omnes linee horarie
equedistabunt sibimutuo et linee meridiane. Invenietur itaque elevationem
poli supra planum huiusmodi declinantis per ad vicesimum octavum
problema quicquid enim ibi ad orizontem retulimus hic ad planum pro-
positum accommodabimus neque opus est ulla supputationis exemplatione alia
quam fecimus eo problemate [illegible] etc. Problema XXXI

[S]i planum aliquod orizontem quidem ad rectos se-
cet angulos ad meridianum autem inclinatum fuerit
angulos horarios in eo provenientes invenire [illegible]

Tales sunt domorum parietes [illegible] sua ab austro vel [illegible]
[illegible] aut parte angulum huiusmodi inclinationum invenire debeam
in libro instrumentorum astronomicorum exponemus. Intra itaque tabulam
latitudinis cum quantitate anguli inclinationis ad meridianum et complemento
altitudinis poli in tua regione quod [illegible] in angulo [illegible] occurrit in-
[illegible] primum incipit. Cuius deinceps inventi complementum in altitudi-
ne poli arcuatim in tabula [illegible] et complementum eius quod in latere [illegible]
descendentium [illegible] inventum secundum vocabis. Deinde tale inventum se-
cundum cum complemento altitudinis poli tabule arcuatim [illegible] et [illegible]
[illegible] lateralis [illegible] descendentibus [illegible] [illegible] [illegible]. Si itaque distan-
cia [illegible] horarum assumpta a meridiano equalis fuerit invento tertio in-
ventum secundum per magnitudine anguli horarum quesiti [illegible] est.
Si autem dicta distantia a meridiano minor fuerit invento tertio [illegible]
[illegible] eam ab ipso invento tertio et [illegible] vocabis inventum quartum
cum quo invento et complemento inventi primum lateralis tabula ingredere
quod [illegible] in angulo [illegible] ascendente [illegible] quadrante minimas. Cum [illegible]
[illegible] et complemento inventi quarti tabula arcuatim intra et quod in
latere [illegible] descendentium accipies inventum ultimum appellabis. Cuius com-
plementum deme ex invento secundo et relinquetur magnitudo anguli
horarum quesita. Verum si super [illegible] distantia a meridiano [illegible]
fuerit invento tertio ipsum inventum tertium ex ea minue et [illegible]
[illegible] inventum quartum cum quo deinceps per omnia procedens [illegible]
et [illegible] hoc [illegible] [illegible] [illegible] per [illegible] complementum ultimi
[illegible] inventi abstulisti ex invento secundo hic tale complementum addes
[illegible] invento secundo et [illegible] quantitas anguli horarum quesita. Cetera
[illegible] ignorandum quod [illegible] inventum quartum nonaginta graduum [illegible]
complementum ultimi [illegible] inventum est quadra [illegible] adiungenda [illegible]
invento secundo. Si autem [illegible] inventum quartum maius fuerit quadrante
inventum ultimum [illegible] ea [illegible] adiciendum est invento secundo et inde [illegible]

quantitas anguli horarii quesita. Exemplum huius documenti. Esto si fa-
ces plani auersa ab austro ad partem orientis cuius inclinatio
ad meridianum sit .48. graduum in regione cuius polus aquilonaris ele. 48. gra-
dibus prominet. volo monstrare angulum horarium unius hore an-
te (?) diame quam ipse monstrans duodecimam nunc finit, et ipse est angulus
exclusus (?) [illegible]. Angulum itaque inclinationis .48. o. cum complemento altitudinis
poli .42. o. mitto lateraliter in tabula et a[l]ge[b]ro inveniens primum .28. 30.
huius demum complementi .61. 30. cum altitudine poli .48. o. arcuatim tabule
inferendo occurrit [illegible] .26. 30. huius complementum .63. 30. distan-
tie [illegible] inveniam secundum. quo demum cum complemento altitu-
dinis polaris .42. arcuatim in tabulam translato occurrit inventum tercium
.20. 3. cum quo distancia [illegible] horarum propositi a meridiano .15. graduum sub hori-
zontali [illegible] [illegible] [illegible] .15. [illegible]
[illegible] .24. 5. Illud quoque cum complemento inventi primi .61. 30.
lateraliter in tabulam traductus et in area eius offendo .30. 28. que [illegible]
austro .ex. 90. gradibus [illegible] .69. 36. et complementum [illegible]
.60. 41. arcuatim in tabulam mitto numerus [illegible] 10. [illegible]
[illegible] [illegible] potencia cuius complementum .19. 40. [illegible]
[illegible] [illegible] .10. 20. [illegible] angulum horarium quesitum

**Plano aliquo tam ad meridianum quam ad orizontem** XXXII
**inclinato quibus racionibus angulum quemque horarium**
**agnoscamus breviter exponere.** [illegible] sunt tertia plana de
[illegible] [illegible] [illegible] [illegible]. Problema [illegible] multos et [illegible]
[illegible] [illegible] habere [illegible] divisas plani [illegible] inclinatos [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
que [illegible] [illegible] ad reliquos quosque [illegible] [illegible]. Sit itaque in-
clinatio plani dati tam respectu meridiani quam orizontis aquilonem versus
ita ut [illegible] pars plani sublimior inter verticem [illegible] nostri et polum
mundi [illegible] reperiatur. Intrabis igitur tabulam arcuatim cum incli-
natione plani ad meridianum et complemento inclinationis eius ad ori-
zontem quodque in latere rubro descendenti offendes ex complemento latitu-
dinis regionis demendum erit, eo autem quod relinquitur postea utens si-
cut in precedenti capitulo cum complemento altitudinis poli [illegible] cum residuo
[illegible] inclinatione plani ad meridianum lateraliter in tabulam mittendo
[illegible] oblatum [illegible] inveniam primum. cetera vero [illegible] [illegible]
quemadmodum in precedenti traditum est. Nec expectes [illegible] [illegible]
[illegible] aliquam explanare nisi numeros precedentis problematis re-
petere [illegible] [illegible] nam ubi primum [illegible] feceris quemadmodum
precepimus, postrema operationes [illegible] minimo [illegible] discrimine ab exem-
plo priori recedunt. Si quid vero [illegible] [illegible] [illegible] documentis [illegible]
[illegible] [illegible] duobus [illegible] [illegible] [illegible] animum tuum non est
mirum [illegible] in tanta rerum varietate nemo quamvis exercitatissimus pla-
ne satis posset emergere nisi figurationem ocularem ante oculos [illegible]
[illegible]. [illegible] [illegible] ingenium [illegible] [illegible] [illegible] habes [illegible] omnia [illegible]
[illegible] [illegible] erit. Sin angustie [illegible] [illegible] imperfecte [illegible]
modi tractasse videmur opus instrumentorum astronomicorum [illegible]
ubi longiori atque tereciori (?) stilo [illegible] omnia metiemur. Ubi demum
tradetur quo pacto memorate inclinationes planorum tam ad orizontem
quam ad meridianum explorari debeant que [illegible] [illegible] quandam geo-
metricam [illegible] [illegible] cum absque commodis instrumentis apprehendi ne-
queunt atque ideirco a presenti lucubracione astronomica parum [illegible] diver-
sa et alibi opportunius versande videbantur. Nunc rursus circa horosco-
pium cuiusque elevationis ludos quosdam astronomicos instaurare libet XXXIII

**Ex ascensione obliqua cuiuslibet noti arcus ecliptice**
**ab ariete aut libra deducti latitudinem regionis ubi**
**talis contingit ascensio indagare.** [illegible] ascensione
rectam propositi arcus ecliptice illius [illegible] [illegible] et obliqua eius
elevatio eius incipit declinationem [illegible] puncti terminantis cum arcum

Subtracta igitur altera duarum ascensionum ab altera minore scilicet a ma
iore relinquetur differentia earum ascensionum cum cuius differentie comple
mento ac complemento declinationis prius dicte tabulam lateraliter ingre
dere et eo quod in angulo communi ex nonaginta gradibus ablato resi
duum cum declinatione predicta arealiter in tabulam mittas latus enim
rubrum descendens numerum quendam offeret qui ex quadrante dem
ptus relinquet latitudinem regionis quam querebas Postremum si data
ascensio obliqua esset equalis semicirculo atque ideirco arcus ecliptice
ei respondens dimidium circulum compleceret tunc frustra tenderemus ad ab
solutionem problematis si quidem ascensio recta semicirculi ab ariete aut
libra exorsi equalis est ascensioni eius oblique in quacumque regione non
magis itaque in una quam alia sed in omni regione talis semicirculus
ecliptice cum semicirculo equinoctiali ad eosdem terminos desinente a
scendit Porro ex descensione quoque obliqua arcus ecliptice cuiuscumque
latitudinem regionis addiscendi facultas prebebitur si hoc unum animo
adverteris quod descensio arcus quantumcumque equat ascensionem obliquam
arcus ei per diametrum oppositi Iam ad exemplum oculos convertere
ponatur quartum graduum geminorum in regione quapiam elevari cum
54 gradibus equinoctialis circuli petitur que latitudo regionis illius ascen
sio recta quarti gradus geminorum est 62 6 obliqua autem elevatio
ponebatur 54 0 erit itaque differentia harum ascensionum recte videlicet
et oblique 27 0 cuius complementum est 63 0 declinatio puncti elu
dentis quartum graduum geminorum est 21 0 cuius complementum 69
0 hec duo complementa lateraliter tabule illata excipiunt 46 17 qui
numerus ex quadra circuli sumptus relinquit 33 43 idest ortivam
amplitudinem memorati horoscopi quam demum cum declinatione pun
cti dati arealiter in tabulam transportanti numerus secundum precepti tenorem
offeretur numerus ille 60 13 quem aufero ex 90 gradibus ut relin
quatur latitudo regionis quesita 29 47. Problema xxxiiii

Proposito arcu ecliptice alicunde quam ab alterutra e
quinoctiali sectione exorso cum ascensione sua obli
qua altitudinem poli aquilonis in ea regione ubi
talis obliqua ascensio accidit eruere Prius
quam ad negotium descendemus hoc unum generaliter promulga
dum est quod quilibet arcus ecliptice cuius duo termini equaliter ab al
tero tercio punctorum tropicorum removentur habet ascensionem
obliquam ascensioni sue recte equalem cuius quidem termini declinationes
ab equinoctiali circulo equales sortiuntur quo demum fieri necesse est
ut duo memorata puncta terminalia per motum primum unius eiusdem et
puncti orizontis transeant Talis autem arcus presenti ludo ineptus
erit cum sicut inter ascensiones suas rectam videlicet et obliquam
nulla reperitur differentia ita et declinationes punctorum terminalium
sese non excedunt quibus rebus intercedentibus problema nostrum
absolvi oportet Si igitur duo puncta terminantia arcum ecliptice da
tum inequaliter a punctis tropicis distent et ambo fuerint in semicir
culo ecliptice boreali aut ambo in semicirculo australi sumas primo decli
nationes eorum quas oportet esse inequales deinde addiscas ascensionem
rectam arcus dati ex eis que supra tradidimus quam confer ad ascensi
onem obliquam datam minorem que earum ex maiori deme ut relinqua
tur differentia earum quam cum complemento maioris declinationis
in tabulam arealiter mittas et quod in area tabule ut asso
let colligetur inventum primum appellabis Rursum inventi complementum in
declinatione maiori tabule arealiter immittas et ex eo quod in latere
rubeo descendenti offendes ipsam declinationem minorem aufer residuum
quod vocabis inventum secundum tum eius inventi secundi complemento ac com
plemento inventi primi tabulam lateraliter ingredere et numeri in
angulo communi occurrentis complementum cum invento primo in tabu
lam arealiter mittas quod enim in latere rubeo descendenti accipies cum
complemento declinationis minoris lateraliter in tabulam ducto et in
angulo communi reperies latitudinem regionis quesitam Si autem

Alterum quidem punctorum terminalium fuerit in parte boreali alterum vero in
parte australi. inuenies ut supra. duabus declinationibus quarum una qui-
dem septentrionalis alia autem meridiana erit. Itemque differentia ascensionum co-
gnita ingredere tabulam lateraliter cum complemento declinationis borealis
et differentia ascensionum prefata numerum quem anguli communis pro inuento
primo teneas. Cuius inuenti complementum cum ipsa declinatione boreali area-
liter tabulam immittas et quod in latere rubro dependenti colligetur de-
clinationi australi adiungas collectumque inuentum secundum appellabis. Cuius
inuenti complementum cum complemento inuenti primi lateraliter in tabulam
transfer et numerum anguli communis ex nonaginta gradibus aufer quod que
reliquum manebit cum inuento primo arealiter tabule inferas nam qui in latere
rubro dependenti accipietur numerus in tabulam demum lateraliter missus
cum complemento declinationis australis elicit uti coniunctum est ex area ta-
bule latitudinem regionis quesitam. Huius problematis tale erit exem-
plum. ponatur arcus ecliptice 36 graduum a fine sexti et vicesimi gradus
arietis incipiens et ad finem quarti gradus geminorum desinens. libeat
que inuestigare latitudinem regionis in qua memoratus ecliptice arcus ele-
uatur cum 24 gradibus et 48 minutis equinoctialibus. Ascensio recta
dati arcus est 37. 48. ex qua minus ascensionem obliquam suppositam
ut relinquatur differentia huiusmodi ascensionum 12. 0. Principium deinde
talis arcus habet declinationem borealem 10. 8. cuius complementum 79.
46. Finis autem eius declinationem itemque habet borealem 21. 0. Cuius com-
plementum 69. 0. Hoc igitur complementum maioris declinationis cum di-
fferentia ascensionum 12. 0. mitto lateraliter in tabulam moxque in area
tabule inuenio 11. 12. quem numerum voco inuentum primum. Cuius deinceps
complementum 78. 48. cum maiori declinatione arcus dati que est 21. 0.
arealiter in tabulam transfero sicque offertur michi in latere rubeo ut assolet
21. 26. ex quo aufero declinationem minorem et residuum 11. 22. appello in-
uentum secundum. Cuius complementum 78. 38. cum complemento inuenti
primi 78. 48. lateraliter in tabulam transferenti michi offertur numerus
ille 78. 8. Cuius item complementum videlicet 14. 46. cum inuento primo 11.
12. arealiter in tabulam ducendo accipietur numerus ille 89. 4. quem po-
stremo cum complemento declinationis minoris 79. 46. lateraliter in tabu-
lam mitto sicque reddo latitudinem regionis quesitam 88. 12. Qui hoc ...
casu ambe declinationes fuerunt septentrionales. Nam deinceps differa-
tur arcus a fine sexti decimi gradus piscium incipiens et ad quartum ge-
minorum desinens. Huius itaque arcus principium australem habet de-
clinationem 4. 32. Cuius complementum 85. 28. Finis autem eius declina-
tionem habet aquiloniam 21. 0. sicuti ex iam dudum traditis comprehendi-
tur cuius declinationis complementum est 69. 0. Arcus ecliptice oblatus
in orizonte recto eleuatur cum 72. 42. in quodam autem orizonte obliquo
cum 88. 42. querimus quantum extollatur polus aquilonis supra eum orizontem.
Differentia memoratarum ascensionum est 50. 0. quam cum complemento de-
clinationis borealis lateraliter mitto in tabulam et eius loco occurrit in-
uentum primum 27. 40. Cuius deinde complementum 62. 20. cum ipsa decli-
natione boreali 21. 0. arealiter tabule inferendo elicitur numerus ille 23.
44. que adiungo declinationi australi ut concrescat inuentum secundum 28. 16.
cuius complementum 61. 44. cum complemento inuenti primi 62. 20. lateraliter
in tabulam ducenti michi offertur numerus ille 40. 21. cuius item complemen-
tum 49. 39. cum inuento primo 27. 40. arealiter in tabulam mitto ut reddatur arcus
87. 2. quem postremo cum complemento declinationis australis 85. 28. latera-
liter in tabulam transferendo elicitur latitudo regionis quesita 86. 24. in
qua videlicet arcus ecliptice propositus eleuatur cum arcu equatoris qui in
principio huius calculi supponebatur. Preterea si fines arcus propositi equali
intercapedine ab alterutra sectionum equinoctialium destiterint dimidium
ascensionis oblique proposite ad dimidium arcum ecliptice datum necessario
spectabit quoniam arcus ecliptice equales et equaliter ab eadem sectione
equinoctiali distantes equalibus ascensionibus in quocumque orizonte donantur
quam ob rem cum medietate ascensionis oblique proposite atque dimidio arcu
ecliptice ad eam spectante problematis precedentis formulam repetemus.

xxxv.

**Dato gradu medii celi cum amplitudine ortiua ascendentis ascendentem ipsum latitudinem quoque regionis si quam habueris inuestigare** ¶ Habet [illegible] regio [illegible] latitudinem quorum amplitudo ortiua ascendentis fuerit declinacio [illegible] ab equinoctiali circulo dum vero capiat cum declinacione tamen hoc [illegible] regio ipsa nullam penitus latitudinem [illegible] ¶ Inuenies itaque primo [illegible] deposita magnitudine anguli fronti ex ecliptica et [illegible] [illegible] punctum medii celi que si minor quadrante fuerit [illegible] [illegible] si autem quadrante maior fuerit eum ex semicirculo demas [illegible] per numero introitualis fuerit [illegible] [illegible] ac complemento [illegible] ortiue ascendentis tabulam arcuatim [illegible] in latere subito descendentis omnis a puncto medii celi [illegible] [illegible] ad punctum ecliptice orientale se [illegible] ¶ angulo ex ecliptica et [illegible] apud celi medium [illegible] minor fuerit recto [illegible] amplitudo ortiua ascendentis fuerit [illegible] [illegible] ¶ Si autem angulus ecliptice et meridiani recto minor fuerit [illegible] ampli[illegible] septentrionalis [illegible] arcum [illegible] in latere [illegible] ortus ascendentis [illegible] ex semicirculo [illegible] [illegible] a medio celi [illegible] descendentis [illegible] [illegible] puncti ecliptice qui est [illegible] horoscopi

¶ Ad latitudinem autem regionis inueniendam [illegible] gradiendum est ampli[illegible] ortiua ascendentis cum declinacione ab equinoctiali ab equinoctiali circulo arcuatim in tabulam mittito [illegible] quod in latere subito descendentis [illegible] erit complementum latitudinis regionis [illegible] ex quadrante circuli auferas et relinquatur latitudo regionis quesita ¶ Aliter quoque eandem reperies si amplitudinem ortiua ascendentis cum complemento [illegible] [illegible] medii celi et ascendentis est arcuatim in tabulam [illegible] [illegible] cum in latere subito descendentis distancia medii celi a [illegible] [illegible] quod distancie declinacionis medii celi si borealis fuerit adiungas [illegible] si australis fuerit ab ea demas quod enim [illegible] modo horum [illegible] latitudinem regionis quesitam [illegible] ¶ Exemplum Ponatur medium [illegible] minor [illegible] in medio celi amplitudinem [illegible] ortiua ascendentis [illegible] borealem .12. graduum [illegible] [illegible] ascendentis [illegible] cum latitudine regionis Angulus [illegible] [illegible] ecliptice apud [illegible] est .11. 26. [illegible] complemento amplitudinis ortiue .10. 0. arcuatim mitto in tabulam [illegible] [illegible] .83. 13. [illegible] ex semicirculo [illegible] [illegible] [illegible] erat minor recto et amplitudo ortiua borealis relinquitur [illegible] .96. 41. [illegible] a medio celi [illegible] [illegible] [illegible] .41. minute [illegible] [illegible] [illegible] [illegible] declinacio aquilonia est .3. 1. [illegible] cum ampli[illegible] horoscopi [illegible] ortus ascendentis .12. 0. arcuatim in tabulam [illegible] [illegible] ille .20. 3. [illegible] .90. [illegible] relinquitur latitudinem regionis .69. [illegible] [illegible] [illegible]

Problema xxxvi

**E medio celi dato ac ascendente cognito latitudinem regionis elicere** ¶ [illegible] ex vicesimo problemate anguli ascendentis et ecliptice apud punctum medii celi [illegible] [illegible] si .90. gradus non transgreditur per [illegible] [illegible] accipienda est si autem [illegible] fuerat ipsum ex semicirculo deme [illegible] [illegible] [illegible] introitualis [illegible] arcum [illegible] ecliptice medii celi et ascendentis [illegible] per secundo numero [illegible] [illegible] si [illegible] fuerit quadrante aut eum ex semicirculo [illegible] si quadrantem [illegible] [illegible] et [illegible] per secundo [illegible] et numero introitualis [illegible] hos itaque duos numeros introitualibus in tabulam [illegible] mitte [illegible] complementum numeri quem [illegible] angulus [illegible] erit [illegible] ortiua ascendentis [illegible] quod si horoscopus in semicirculo ecliptice australi fuerit septentrionalis vero si in [illegible] ecliptice boreali [illegible] [illegible] [illegible] medio celi et amplitudine ortiua ascendentis [illegible]

formulam predicti problematis absolutus. Vel sic in proprio sine circulis sive
capita regionum possidentis medium problemate celi medium quod quidem
urbis hec regionibus que est qualibet principalium horoscopum in medio celi
existente alterum punctorum equinoctialium ascendentem obtineat.
In exemplo Alcoribus accipias habebat quedam regio proprium quidem pri
simum in medio celi caput aut cancri in ascendente volo inquirere latitu
dinem regionis illius inquietus meridiam et ecliptice apud celi medium
est .69. 22. quem sume de gradibus collectis de semicirculo per ablatus
.120. redundant que cancri a principiis remouet latera tabule immittam in
[illegible] illic .42. 8. Ita ex quadra circuli demptis relinquitur .51. 42.
amplitudine ortiua ascendentis qua demptis cum tractata declinatione
solis .23. 30. capita encontra debitum arcuum in tabula sufficiens certo
.27. 42. cuius complementum .62. 6. latitudine regionis sumptam et questa
continet. Atque sic alia amplitudine ortus mensurata cum complemento
arcus inter medium celi et horoscopum gradus idem regunta gradibus
arcuum in tabula reduxero latum cum ipsa acceptum in latere tabule
ut assolet .48. 30. complementum scilicet altitudinis meridiane medii celi a quo
demum complemento minime declinationis auferimus ipsius medii celi et su
perest latitudo regionis quesita .62. 6. Hec igitur est prima omnium
latitudinum que horoscopum medium et regionum regionis radiationum sese
illustrare sumpsit ex qua re si quid insuper que circa potest regio
[illegible] amplissimo haud inuisu tribuere ita cum pluribus in ea que
circuitus latitudinem sumus est etc. **Problema xxxviij**

Cognita latitudine regionis alicuius in quanto tempore
quilibet arcus ecliptice borealis datus circulum orizontale
pertranseat experiri. Arcus datus si fuerit semicircularis
orizontali ipsum separantem, fiunt duodecim horarum equalium quoniam semicircu
lus equinoctialis cum tali semicirculo ecliptice quemlibet in orizonte circulum
maximum semper oriatur. Si vero arcus datus hoc quidem semicirculo
fuerit duo aut plures sint a capite cancri et eo ab equinoctiali circulo
circulo equalis habentes declinationes sicut ascensiones rectorum sub arcu
lium quod in tempore debetur huiusmodi ascensioni recte fiet per
transitus ante dictus. Ut si puncta terminalia arcus propositi in
equalitate a capite cancri distent ab ipso equinoctiali circulo serclauer
rectum ut ascensionum dati arcus addiscas et declinationes trium principum
quoque sunt eius. Deinde per decimumnonum problema que altitudinem
principium in circulo orizontali cum altitudinis complementum cum complemento
declinationis dicti principii tabule arcuum intrabis quod in latere tabulo
descendentis occurrit notabis inuentum primum. Similiter secundum altitu
dinem puncti finalis in circulo orizontali cum altitudinis complemento
ac complemento declinationis eiusdem puncti finalis tabulam item arc
uum ingredere quod in linea tabulari descenderis offeret inuentum secundum
notabis. Horum itaque inuentorum differentiam adde ascensioni recte arcus
propositi si punctum finalis borealior fuerit puncto initiali aut eandem
differentiam ex ipsa ascensione recta auferas si punctus initialis fuerit bo
realior puncto finali sic enim emerget arcus equinoctialis circuli qui
una cum proposito arcu ecliptice exorietur orizontem. Tempus autem
cum quantum semper indicat faciliter fiet si per quindecim gradibus ut asso
let singulas horas equales sumpseris. Ut si arcus datus a sectione
initiali incipiens post autumnalem sectionem desinat inuentum primum erit
quadrans circuli absque ulla supputatione. Si vero pro capite arietis initiali
finiat a ad libere principium desinat inuentum secundum [illegible]
[illegible] In utroque quoque horum casuum punctis intercalatis omittes reperta
bo vel sup[illegible] expediens. Verum istius problema longe celerius absolues
hoc precepto: accipe ascensionem obliquam eius arcus qui per diametrum

Latitudo
anguine

opponitur arcui dato in regione cuius altitudo polaris consonam altitudine pola
ris tue regionis quadrans circuli conficit quindecim namque gradus singulis ferme
de ascensionibus singulas equales prebebunt horas singuli denique gradus
si qui numero quindenario fuerint inferiores quaternas minutias partu
rient. Querenti autem quemadmodum hoc problema afferat non ante responde
bimus quam commentaria nostra ad universam pene astronomiam evoluerit
non enim in presenciarum voluit lex operis hactenus aliud quam usum ta
bule nostre describendo exponere. Inventa profecto non nichil voluptatis le
ctori accedet ubi ad tam varios (quam fortu incredibiles) usus hunc abacum
nostrum accommodari posse animadverterit. Ut exemplo sit accipe si
arcus ecliptice datus. 102. graduum a fine quadrati graduum geminorum in
cipiens et ad finem sexdecimi virginis. virginis. desinens principium hu
ius arcus declinacionem borealem habet. 20. cuius complementum 69. 0
finis autem declinacionis equidorialem sortitur. 4. 32. cuius complementum
. 88. 28. volo inquirere quanto tempore memoratus arcus excurrat circulum
verticalem in latitudine. 88. graduum. Hanc ergo latitudinem cum declinaci
one puncti initialis. 21. 0. arcuatim mitto in tabulam et dico altitudinem
puncti dicti initialis in circulo verticali. 28. 40. Similiter cum eadem la
titudine regionis. 88. 0. et declinacione puncti finalis. 4. 52. arcuatim ta
bulam ingredienti michi offertur altitudo puncti finalis in circulo vertica
li. 7. 7. 28. porro complementum declinacionis initialis 69. 0
cum complemento prime altitudinis. 61. 10 arcuatim in tabulam transferendo
exhibitur inventum primum. 89. 27. Non aliter complementum decli
nacionis finalis. 88. 28. et complementum altitudinis secunde. 82. 32. ar
catim in tabulam missa elicuit inventum secundum. 84. 3. Horum inven
torum differencia est. 14. 16. quam aufero ex ascensione recta arcus pro
positi. 104. 8. et relinquitur numerus ille. 89. 42. tantusque ferme arcus
de parallelo puncti finalis elevatur cum arcu ecliptice dato supra cir
culum verticalem cui de tempore respondent hore quinque et ferme. 49. minu
ciones hore equales. Hactenus de horoscopo / nunc de eo quod duabus re
gionibus communiter accidit paucula quedam degustabimus. XXXVIII

## Duabus regionibus idem eodem instanti ascen
## dens notum habentibus puncta autem ecliptice
## in meridianis suis diversa et cognita utrius
## que latitudinem differenciam que longitudinum suarum

perscrutari. Quod due regiones longitudine latitudineque differentes
unum communem eodem temporis instanti horoscopum habere possint
haud quaquam absentaneum confitebere ubi ea que in commentariis astrono
micis tradita sunt satis perspexeris. Idem autem instans significamus
non respectu meridiei sed cum fieri nequit quod preponitur. Verum idem
instans absolute accipiendum est quamvis ipsum in regionibus longitudine
differentibus diversas sortiatur appellaciones propter varias ad meridiem
distantias habitudines. Subtrahe igitur ascensionem rectam medii celi unius
regionis ab ascensione recta medii celi alterius regionis et relinque
tur differencia longitudinum suarum. Cum autem in utraque regione medium
celi notum subiciatur cum horoscopo communi per tricesimum sextum pro
blema ne multis morerimur utriusque regionis latitudo non ignorabitur.
Verbi gracia habeant due quepiam regiones in ascendente arietem gra
dum tamen communem quarum altera quidem in medio celi teneat. 9. 21. pi
scium altera autem. 2. 28. eiusdem signi. quero quantum differant in longi
tudine idest quanta porcio equinoctialis circuli inter meridianos eorum
concludatur. Si apud capricornum initium ascensionum rectarum accepero
ascensio recta medii celi primi est. 41. 16. secundi autem ascensio recta est
. 66. 20. que a priori dempta relinquit. 25. 36. differencia longitudinis
quesitam. Primam vero memoratarum regionum orientaliorem indicatio
secunda quod illius medium celi posterius est medio celi regionis secunde
porro si cum ascendente earum communi et utriusque medio celi secundum
formulam tricesimi sexti problematis resumpsero. Reddetur latitudo pri
me quidem regionis. 27. graduum secunde autem. 41. supputatiunculas brevi
tatis amore missas facio cum ex antea tractatis facile comparari possint

## Due quevis regiones notarum latitudinum XXXIX
## eodem instanti communem habeant ascendens

cognitum habuerint quantum longitudinibus earum
intersit spacium explicare Per tricesimum sextum huius
hic sumptum ex ascendente communi noto ac latitudinibus regionum
datis duas ascensiones obliquas horoscopi communis singulatim
agnosces quarum excessus equabit differentiam longitudinum quesi-
tam Reperta igitur ascensione obliqua ascendentis communis in una
regione ex ascensione obliqua eiusdem in altera relinquetur differen-
tia longitudinum expectata et que aut regio orientalior erit que ma-
iorem horoscopo prebet communi ascensionem Cuius rei tale datur
exemplum duarum regionum altera quidem .22. gradus latitudinis
habeat altera vero .40. quibus communiter in ascendente sint .14. gra-
dus geminorum queso quantum longitudines earum differant et que
utra earum orientalior existat Invenio itaque ascensionem obli-
quam ascendentis in prima quidem latitudine .41. 29 in secunda ve-
ro .82. 43 quarum excessus est .7. 26. 15 ergo notificat differentia
longitudinum quesitam Cumque prima duntaxat ascensionem secun-
dam superet primam regionum orientaliorem relinqua concludo xl

## Duarum regionum latitudines note fuerint cum differentia longitudinum suarum an sit aliquod ascendens eodem instanti ipsis commune subtiliter explorare

Si neutra latitudi
num minor fuerit complemento maxime declinationis solaris que est
minor .66. 30. sive equales invicem extiterint sive non modo ver-
tices earum regionum non sint in eodem circulo magno per polos
mundi descripto possibile est eas horoscopum sortiri communem
verum huiusmodi loca quoniam humane habitacioni non con
veniunt missa facimus ad eas duntaxat regiones calamum fle
ctendo quarum latitudines complemento maxime obliquitatis
solaris inferiores sunt Si itaque due latitudines date fuerint equa
les invicem et utraque earum minor complemento maxime de-
clinationis solaris impossibile est propositas regiones aut data
loca quecumque in ascendente ullo coniungi duabus aut datarum re
gionum latitudinibus imparibus oblatis hac lege problema diffini
endum erit Intra tabulam arcuum cum complemento latitudinis
minoris ac complemento maxime declinationis solaris quod cum
in latere rubro descendendi offertur argumentum commutationis
appellare licebit Deinde lateraliter intra cum complemento latitudi
nis maioris et differentia longitudinum duarum regionum
quodque in angulo communi videbis inventum primum vocabitur
Cuius demum inventi primi complementum cum latitudine maiore in
tabulam arcuum mittas et ex eo quod in latere rubro descendenti
occurret latitudinem minorem abice quodque relinquetur inven
tum secundum nuncupabitur Complementa igitur horum inve
torum tabule lateraliter inferas eo cum quod in angulo communi
offertur ex 90. gradibus dempto residuum pro invento tercio
teneбis quod tandem inventum tercium cum invento primo
arcuum in tabulam ducito et id quod in latere rubro descendendi
reperietur differentie habende gratia numerus comparandus
agnominetur qui si minor fuerit argumento commutationis supe
rius dicto necesse est duas subiectas regiones hic in die na
turali idem eodem instanti habere ascendens Si aut numerus
comparandus argumento commutationis fuerit equalis semel dum
taxat in horoscopo communicabunt at si nos talis ipsum argume
tum commutationis superaverit numquam in ascendente ullo propo
site participabunt Porro in ambabus regionibus longitudine non
differentibus ex capite dicto communiter dici solet nec non
et minus libere Horum exempla libeat animadvertere
Suppositam regio quedam habens latitudinem .22. gradum

Alia item latitudinem .41. graduum sortiatur magis quidem eciam duabus prope
quinque gradibus volo reddi certior sit ne communis quispiam horosco-
pus utrisque regionibus an non. Igitur iuxta preceptum latitudinis mi-
noris complementum puta .48. 0. cum maxima obliquacione solari
mitto arcuatim in tabulam ut inde statuat argumentum conmutacio-
nis .32. 27. quod seorsum custodio donec usus exegerit. Deinde com-
plementum latitudinis maioris .49. 0. cum differencia longitudinum
.9. 0. lateraliter in tabulam ducenti mitto offertur inventum primum
.5. 9. Cuius complementum .84. 51. maioris latitudo .41. 0. arcuatim in
tabulam illatis deprompsit .41. 7. a quibus minor latitudo summota
relinquit .9. 7. inventum secundum. Cuius porro complementum .80.
.43. cum complemento inventi primi lateraliter in tabulam transferendo
elicitur numerus ille .84. 20. Cuius item complementum una cum
invento primo arcuatim in tabulam mittere iubeor ut illinc excerpat
numerus comparandus .19. 9. qui quoniam minor est argumento commu-
tacionis eam dudum servato constat duas suppositas regio-
nes qualibet mundi revolucione duplicem horoscopum communem
sortiri

Probleuma 41

## Duabus regionibus notas latitudines longitudinesque aut differenciam longitudinum suarum cognitam habentibus ac in ascendente quopiam communicantibus ascendens ipsum commune sciscitari

Hec duo problemata ... separavimus quod non sit sibi usque coherent. Et cum proponere duas
regiones nullo prorsus horoscopo communicantes cuius rei coniecturam
precedens problema edocuit presenti autem nequaquam ad eum casum
deprimit est. Si igitur in uno dumtaxat ascendente communicent et re-
gio borealis fuerit eciam orientalior principium capricorni utriusque re-
gionis orizonte eodem instanti temporis constituetur. Si autem regio
borealior fuerit occidentalior suo tempore caput cancri in utrius-
que eorum orizonte reperietur. At si in duobus communicent ascen-
dentibus resume numerum comparandum quem in precedenti col-
legisti una cum complemento latitudinis minoris tabule lateraliter
immittas et quod in angulo communi occurrat cum maxima declinaci-
one solari demum tabule arcuatim ingeras. Numerus cum rubee
in latere descendenti occurrens ubi ex quadrante demptus fuerit
relinquet distanciam ascendentis communis ab initio quidem capricor-
ni si regio borealior fuerit eciam orientalior suo tempore ab
initio autem cancri si dicta regio fuerit occidentalior. Huiusmodi
igitur distanciam computa utrimque a principio cancri vel capricorni
sicut res ipsa postulat et perducens ad punctum ecliptice quod eo-
dem tempore instanti solet esse in utriusque regionis orizonte. Exem-
pli gracia libet resumere proximas regiones quarum orizontes duo
ecliptice puncta communiter excipere solent. Numerum itaque com-
parandum .19. 9. cum complemento latitudinis minoris .48. 0. mitto
lateraliter in tabulam elicio .43. 18. 7. quem numerum cum maxi-
ma declinacione solari .23. 30. arcuatim in tabula ducenti mitto
offeruntur .57. 24. qui ex quadrante dempti relinquunt .42. 14. Cer-
tam igitur proximo utriusque horoscopi communis et capitis can-
cri intercapedinem qua utrimque ab ipso capite cancri innumerata
sunt quedam .7. 24. illinc vero .22. 19. locoris occurrent.

Hec circa horoscopum ludos quosdam mathematicis agitavimus.
Tam demum alia specie problematum te oblectabimus et qui-
dem pueri si unquam genituras hominum iudicare velis nam
ipsa quibus accidens quodlibet homini eventurum est per directio-
nes potissimum si fides auctoribus habenda est presciuntur que
quidem sequencium problematum ministerio quemadmodum alibi tradidimus
facile comparantur

Probleuma xlii

## Quantum elevatur polus borealis supra circulum positionis stelle cuiusvis aut alterius puncti in celo signati perquirere

Circulum diffinimus positionis eius qui per duas sectiones meridiani et orizontis ac centrum stelle incedit. Elevacio aut poli borealis supra circulum positionis est arcus circuli magni a polo mundi aquilonari incedens ipsi circulo positionis ad rectos angulos. In hoc negocio perquirenda est declinacio stelle cum distancia eius a meridiano. Cum igitur ea distancia sive orientalis fuerit sive occidentalis minor quadrante fuerit et declinacio septentrionalis, intrabis lateraliter in complemento declinacionis et ipsa distancia a meridiano quodque in angulo communi offendes inventum primum nuncupabitur. Cuius demum inventi complementum cum declinacione stelle areatim in tabulam mittas. Complementum eciam nomen rubri in latere sinistro occurrentis adiectum latitudini regionis tue inventum secundum procreabit. Duorum igitur predictorum inventorum complementa tabule lateraliter ingeras et numero angulari ex nonaginta gradibus dempto si inventum secundum minus quadrante fuerit aut eo nonaginta gradibus adiecto si tale inventum secundum quadrantem circuli superaverit residuum aut collectum uti res postulat vocabis inventum tercium. Cum quo deinceps invento tercio inventoque primo tabulam areatim ingredere et quod in linea rubra ut assolet offeretur inventum quartum appellabis. Tale autem inventum quartum est arcus circuli verticalis inter verticem regionis circulumque positionis conclusus. Hoc tandem inventum quartum cum latitudine regionis lateraliter in tabulam mittas habebis cum in angulo communi elevacionem poli borealis supra circulum positionis quam querebas. Si autem distancia stelle a meridiano equalis quadranti fuerit tunc ipsum complementum declinacionis pro invento primo tenebis latitudinem autem regionis pro secundo reliqua vero per ordinem ut prius absolves. Cum vero distancia a meridiano quadrantem superaverit subtrahe eam ex semicirculo cum reliquo aut et complemento declinacionis tabulam lateraliter ingredere angulus namque communis inventum primum afferet. Cuius demum inventi complementum cum declinacione stelle areatim in tabulam transferens complementum cum nomen in latere rubro sinistro oblati demptum ex latitudine regionis inventum secundum relinquet cum quo deinceps procede per omnia quemadmodum paulo ante dictum est quando stelle distanciam a meridiano quadrante minorem subiecimus. Illud autem non est oblivione pretereundum quod quamquam inventum secundum maius est quadrante circuli inventum quoque tercium maius erit quadrante quocirca cum ipsum non possit haberi in tabula residuum eius de semicirculo in tabulam mitte cum invento primo et reliqua universa ut prius exequere. Porro si inventum secundum quadranti equale erit et contrat inventum quoque tercium a quadrante non discrepabit et simul inventum primum pro invento quarto tenendum est. Nunc si stella ad austrum decesserit ab equatore quid facto opus sit commonebimus. Intra tabulam lateraliter cum distancia stelle a meridiano et complemento declinacionis sue quodque in angulo communi offendes inventum primum appellabis cuius inventi complementum cum declinacione stelle areatim in tabulam transfer latitudine namque regionis sumpta ex complemento eius quod in latere rubro dependenti colligetur residuum vocetur inventum secundum. Complementa utriusque dictorum inventorum tabule lateraliter inferas numerus enim anguli communis ex quadrante reiectus inventum tercium relinquet quo rursus invento tercio areatim in tabulam misso cum invento primo numerus ruber in latere sinistro occurrens inventum quartum nuncupabitur. Hoc tandem quartum inventum cum latitudine regionis tabule lateraliter immittas atque in angulo communi accipies elevacionem poli arctici supra circulum positionis quam desiderabas. Quod si stella declinacione careat simplici duntaxat introitu propositum attinges nam inventum primum erit arcus equatoris inter meridianum

Circuli positionis

Et stellam zodiacus qui in presenti notus supponitur. Inventum autem secundum erit altitudo meridiana circuli in tua regione idest complementum latitudinis tue regionis. Tercium vero investigabis hoc ordine. Intrabis tabulam lateraliter cum latitudine regionis complemento atque distancie stelle a meridiano complementum cui arcus in angulo communi occurrentis inventum tercium nominabitur cum quo demum invento tercio ac distancia stelle a meridiano subtract. arcu equatoris inter meridianum et stellam contento areatim tabulam ingrediaris numerumque ruber in latere descendenti arcu plus pro invento quarto tenebitur. Quod postea inventum quartum una cum latitudine regionis lateraliter in tabulam mittas angulus enim communis prebebit elevacionem poli borealis supra circulum posicionis quam expectabas. Verum referimus rem efficacius hoc pacto complementum inventi tercii cum complemento altitudinis polaris in tua regione areatim tabule inferas. Nam complementum eius quod in latere rubro descendenti offertur elevacionem poli aquilonii supra circulum posicionis declarabit. Hec autem precepta stellis supra orizontem solum constitutis accomodantur. Si itaque stelle cuiuspiam aut puncti sub orizonte sub orizonte existentis posicionem modo predicto nosse velis supputacionem tuam facias cum puncto per qui per diametrum stelle opponitur is enim in eodem circulo posicionis in quo stella ipsa iacet procul dubio reperitur. Quantus postremo sit fructus huius problematis plane intelliges si ad opus direccionum applicueris animum. Cognita enim elevacione poli supra circulum posicionis in quo iacet significator quispiam scietur et arcus equinoctialis circuli coascendens vel condescendens arcui ecliptice qui est inter significatorem et promissorem idest locum ad quem fieri debet directio. Multas insuper alias utilitates hinc haurieb(is) si paulo profundius astronomicis meditacionibus te immerseris. Quam in exemplo ut arbitror faciliora videbuntur. Omnia in habitacione cui polus aquilonius extollitur. 48. gradibus stella quopiam habens idest latitudine declinacionis spacio duarum parcium distet a meridiano. 30. gradibus idest spacio duarum horarum equalium volo docere elevacionem poli articum supra circulum posicionis quem stella memorata possidet. Igitur complementum declinacionis stelle. 72. 0. cum distancia eius a meridiano. 30. 0. mitto lateraliter in tabulam et offero inventum primum. 28. 28. cuius demum complementum. 61. 36. cum ipsa declinacione. 18. 0 areatim tabule inferendo complementum. 69. 26. quemadmodum rubeus numerus ille. 20. 38. huius complementum. 69. 26. quemadmodum regula monet adiungo altitudini polari regionis. 48. 0. sic que concrescunt. 117. 26. idest inventum secundum. Illius complementum. 62. 26. per complementum enim primo accipe differenciam arcus iam quantitatis. Et complementum inventi primi. 61. 36. lateraliter in tabulam quadrantibus cum complemento inventi secundi mitto offeruntur. 23. 48. quibus adiungo quadrantem quoniam inventum secundum quadra circuli maius fuerit ut colligatur inventum tercium. 113. 48. Tale inventum tercium aufero ex semicirculo. 180. 0. et relinquuntur. 66. 12. areatim in tabulam mittens excipio inventum quartum. 31. 21. quo tandem una cum latitudine regionis per tabule latera introducto depromentur elevacio poli supra circulum posicionis. 22. 54. quam hactenus querebamus. Rursus distancia stelle proposite a meridiano quadrantem circuli compleatur ceteris universis ut antea per manentibus. Complementum itaque declinacionis perinde quasi invento primo utemur. Altitudine autem polari regionis tanquam invento secundo quorum complementis. 18. 0. et. 42. 0. lateraliter in tabulam missis exigitur numerus ille. 11. 46. qui demptus ex quadra circuli relinquit inventum tercium. 78. 14. quod denique inventum tercium una cum invento primo. 72. 0. areatim in tabulam transferendo inventum aucupabor quartum. 76. 27. Hoc postremum inventum cum latitudine regionis. 48. 0 lateraliter introducenti mihi obicitur elevacio poli supra circulum posicionis. 46. 14. que expectabatur. Reliquos autem casus quoniam haud multum ab antedictis discrepant exemplari supputacione non illustramus.

Problemma xliii

Data elevacione poli borealis supra semicirculum posicionis quempiam, quantus sit arcus equatoris ab eadem semicirculo et meridiano interclusus experiri. Ne turberis o lector quod nunc



F. complementum eius quod accipe ... quantus in ... est transire

Quidem de circulo posicionis sermonem faciemus. Nunc autem de semicirculo, in effectu enim nulla prorsus extat diversitas. Ut semicirculum autem posicionis non accipias qualibet circuli posicionis medietatem sed eam duntaxat que ad duas sectiones meridiani et orizontis terminatur. Intrabis igitur tabulam nostram arealiter cum latitudine regionis tue data, que elevatione poli borealis supra semicirculum posicionis eo namque quod in latere rubro descendent et assolet deprehendetur ex 90 gradibus ablato residuum cum complemento elevacionis polaris date supra semicirculum posicionis arealiter rursus in tabulam mittes. Complementum enim numeri in latere rubro occurrentis arcum quesitum pervulgabit. Atque documento tabula posicionum generalis quam in libro directionum posuimus ad quaslibet regionis latitudines componi potest. Et si ex huiusmodi arcu equatoris dato elevacionem poli borealis supra circulum posicionis libeat invenire convertendo in id presens problema, recurre ad absolucionem precedentis problematis. Etenim cum loco ubi stellam declinacione carentem subicimus propositum tuum consequeris. Intrabis enim lateraliter cum complemento arcus equinoctialis dati et latitudine regionis. Complementum autem eius quod in angulo communi ut assolet reperietur cum complemento latitudinis regionis arealiter denuo in tabulam mittendo, dabit complementum elevacionis polaris quesite, quo demum ex nonaginta gradibus reiecto superabit ipsa elevacio polaris supra semicirculum posicionis quesita. Hinc quoque patebit notitia circulorum octo domos cardinibus intercedentes definienda. Quantum enim polus aquilonius supra unumquemque eorum elevatur, quoniam ipsi cum meridiano ac orizonte trigenos equinoctialis circuli gradus secundum racionabilem consideracionem intercludunt. Que res in opere quidem directionum parumper delibata in commentariis astronomicis sacius lucubratur. Etiam in exemplo libeat scrutari arcum equinoctialis circuli de quo agitur in regione cui polus urbis extollitur 48 gradibus, sit que data elevacio eiusdem poli supra semicirculum posicionis 17. 0. Rubeo itaque latitudinem regionis 48. 0. cum elevacione poli 17. 0. arealiter in tabulam mittere, quod rite exequenti michi offertur numerus ille 23. 10. cum complemento 66. 40. cum complemento elevacionis polaris supra semicirculum posicionis 73. 0. arealiter item tabule inferendo elicitur arcus 75. 1. quem ex 90 quartis auferens video residuum arcum equatoris quesitum 14. 49. Rursus prebeat michi quispiam arcum equatoris 50. graduum a meridiano et semicirculo posicionis interceptum. Postulet que sibi reddi elevacionem poli ursini supra eundem posicionis semicirculum. Mox profecto geritur petitori, nam complementum arcus equinoctialis dati quod est 40. 0. cum latitudine regionis 48. 0. per tabule latera introduxero. Numerum enim in area collectum 60. 8. ex quadrante auferam reliquum vero 29. 46. cum complemento altitudinis polaris in regione proposita 42. 0. arealiter in tabulam transferens excipio arcum 60. 48. qui ex quadra circuli demptus relinquit 29. 2. elevacionem poli arctici supra semicirculum posicionis que petebatur.

Elevacionem poli supra circulum posicionis in omni regione invenire

## Problema xliii

Cognita porcione circuli verticalis clausa inter polum orizontis et circulum posicionis quemcumque, quantum polus borealis supra eundem circulum posicionis elevatur quantus denique sit arcus equatoris inter meridianum et eundem circulum posicionis comprehensus invenire. Circa elevacionem poli aquilonii supra circulum posicionis sic operaberis. Intrabis tabulam lateraliter cum latitudine regionis et data porcione circuli verticalis. Nam in angulo communi antiqualiter elevacionem poli borealis quesitam. Ad cognoscendum autem arcum equatoris sic procede. Complementum elevacionis poli iam invente cum complemento arcus verticalis dati arealiter

Tabule inferas Nam complemento numeri rubri in latere uti oportet collati ac
arcum equatoris quesitum inspicitur. Et si ex elevatione poli borealis supra
circulum positionis liberet predictam portionem circuli verticalis in-
tra arcalium cum latitudine regionis et data elevatione poli borealis su-
pra circulum positionis Numerus enim lateris rubri descendentis portionem
quesitam manifestabit. Si vero per distantiam stelle a meridiano et decli-
nationem eiusdem latitudinem quoque regionis, agnoscere velis huiusmodi
portionem circuli verticalis operare iuxta tenorem quadragesimi secundi
problematis nichil prorsus immutando donec inventum quartum elicies
tale enim inventum quartum erit portio circuli verticalis quesita. Utilita-
tem denique huius problematis senties si primus opinionem Campani de
equandis domibus celi intellexeris quam in opere directionum breviter
commemoravimus ubi etiam tabellam huic negocio idoneam exaravi-
mus in qua descripta sunt intersticia domorum id est arcus equatoris
duobus circulis domos distinguentibus interclusi. Ceterum anguli sunt no-
meri polares qui representant elevationes poli borealis supra circu-
lis domorum distinctores. In summa ergo fructus problematis est deffi-
nire iudicium celi domicilia secundum consideracionem Campani stellas
quascumque in eis prudenter collocare. Exemplo lucidiora reddentur om-
nia memorata. In latitudine 48 graduum supponatur portio circuli
verticalis inter meridianum et semicirculum positionis clausa 30 gra-
duum sitque iam invenienda elevationem poli aquilonij supra eundem
positionis semicirculum latitudinem itaque regionis 48 0 cum portione
prefata circuli verticalis 30 0 lateraliter in tabulam mittens in eius con-
fluxu in area tabule apparet elevatio poli quesita 21 49 Cuius demum
complementum 69 11 cum complemento dicte portionis verticalis 60 0
arealiter tabule illata elicient 68 43 que ex quadrante ablata relinquunt
21 17 arcum equationis quesitum. Versa denique racione per elevationem
poli supra semicirculum positionis 17 graduum cupiat quispiam quantitatem
huiusmodi portionis verticalis et cum latitudinem regionis 48
0 cum dicta elevatione polari 17 0 arealiter in tabulam transferat mox
ea secundum precepta reddet portionem verticalem 23 10 arcum autem equa-
toris a meridiano et semicirculo positionis interceptum non aliter quam in
precedenti problemate consequetur

Problema xlv

Duobus locis in superficie signatis terrestri, longi-
tudinum latitudinumque notarum quo pacto inter-
capedinem eorum metiri deceat explanare

Nam hec propositio de globo terre loquemur, perinde quasi ad unguem
sphericus sit. Per intercapedinem aut locorum significamus arcum circu-
li magni celestis qui inter vertices eorum comprehenditur Et quidem
arcus omnium lineatum circularium inter huiusmodi puncta verti-
calia cadentium brevissima perpenditur Sed eo quoque arcu itinera nego-
ciatorum fieri solent nisi quantum asperitas terre stagnaque et flumi-
na atque alia id genus obstacula viatores dispellunt Cum fuerit igitur
arcum talem subtrahe longitudinem unius loci a longitudine alterius et
relinquatur differentia longitudinum que quidem differentia si ab initio
daretur cum latitudinibus locorum sufficiens una problemati parata
esset tamen longitudines ignote essent. Si itaque latitudines loco-
rum fuerint equales complementum utriusque earum cum dimidia diffe-
rentia longitudinum tabule lateraliter immittas Numerus enim area-
lis duplicatus intercapedinem ille prebebit quesitam Si vero inequa-
les extiterint latitudines ille intra lateraliter cum complemento la-
titudinis minoris et differentia longitudinum quodque in angulo com-
muni ~~complementum cum ipsa~~ offeretur vocabis inventum primum Cuius
inventi complementum cum ipsa latitudine minori arealiter in tabu-
lam mittas et id quod in latere descendenti rubro accipietur ex latitudine
maiori demas, residuumque inventum secundum agnomines Talium
igitur inventorum complementa lateraliter intraducas numerus enim
anguli communis ex quadrante demptus relinquet intercapedinem
locorum quesitum in gradibus scilicet quorum 60 et 300 sunt in circu-
ferentia maximi circuli celestis totidemque in circumferentia maximi
circuli terrestris. Et si eam distantiam locorum in terra agnoscere li-
beat secundum mensuram quamlibet usitatam Detur gradui in stadiis
explorato numero stadiorum uni gradui respondencium summam

Omnibus gradibus distantie debitam facile concludes nisi multiplicandi re gulam prorsus ignores. Ceterum autem que monuimus accipienda sunt de locis quorum latitudines aut ambe septentrionales sunt vel aut ambe meridiane. Si enim unius quidem loci latitudo septentrionalis fuerit alterius aut meridiana ingredere tabulam lateraliter cum complemento latitudinis borealis et differentia longitudinum quodque in angulo communi offertur inventum primum vocabis. Cuius inventi complementum cum ipsa latitudine boreali arealiter in tabulam mittas numerus cum ruber qui in latere descendenti occurret adiectus latitudini australi conflabit inventum secundum. His deinceps duobus inventis ut prius utere. In exemplo ponantur due urbes Roma quidem ytalie Nuremberga autem germanie. Habet roma iuxta ptholomei numeros habet longitudinem ab occidentis fine .36. 20. latitudinem autem eius fere .41. gradum ut instrumentum didicimus. Nuremberge denique longitudo perhibetur .27. 40. latitudo autem 49. 30. que quamvis incerta et sic ambigue sint nisi recentiorum experimentis stabiliantur in presentiarum non obstabunt quo minus tradiciones nostre exemplari quodam calculo illustrentur cum et numeri quibus commentum longitudinum latitudinumque tabule tale munus reddere possint. Itaque differenciam longitudinum exquisitam invenio novem gradum qua cum .48. 0. complemento latitudinis minoris lateraliter in tabulam duxi in hoc exemplo offertur inventum primum .6. 51. Item complementum .83. 19. cum ipsa minori latitudine .42. 0. arealiter tabule immittendo occurit numerus ille .41. 21. qui ex latitudine maiori .49. 30. detractus relinquit inventum secundum. 8. 9. Huius item complementum .81. 51. cum complemento inventi primi .83. 9. per latera tabule ingrediendo colligitur numerus .79. 24. cuius residuum de quarta circuli .10. 36. intercapedinem gradum quesitam. Huius intervalli tercii dimensionem arbitrio tuo relinquimus. Si enim duarum urbium intercurrencia miliaria computare libeat quorum .80. ut aiunt ytalicana unum gradum colligi debentur. Duc octogenarium numerum in decem gradus integros et nascentur .800. Deinde .36. minutias per .80. producentur .2880. que divisa per .60. dabunt .48. adiungenda productis .800. ut consurgat totum intervallum .848. miliarium. Porro si intercapedinem eandem per .15. extendens prodibit numerus miliarium germanicorum quam etiam miliarium vulgo vocant. Similiter summa stadiorum inter urbes memoratas conclusorum fiet si eandem intercapedinem per numerum stadiorum unum gradum debitorum multiplicaveris.

## Ex latitudinibus duarum regionum inequalibus cum angulo posicionis differenciam longitudinum earum indagare

Si locus secundus sub eodem meridiano fuerit cum primo quamvis nullus sit posicionis angulus velud ex diffinitione inferius accipienda intelliges intervallum tamen locorum per spacium unius gradus respondens videbitur. Exhibit enim numerus graduum quibus additus latitudini primi loci si secundus borealior resultabit latitudo loci secundi eiusdem quidem denominacionis semper cum latitudine loci primi proterqua dum numerus graduum ex intervallo locali dictorum subtrahi nequit ex latitudine loci primi. Tunc enim vicissim demenda est latitudo loci secundi primi a numero graduum ut relinquatur latitudo loci secundi alia quidem denominacione quam erat latitudo loci primi. Locis autem huiusmodi non iacentibus sub eodem meridiano cognoscendus est angulus posicionis quem continet linea itineris ad locum situm cum linea meridiana loci primi. Cuius igitur anguli quantitatem cum intercapedine locorum idest intervallo graduum quemadmodum paulo ante monuimus converso mitte lateraliter in tabulam nostram et quod in angulo communi sese offeret inventum primum appellabis. Cum deinceps inventi complemento cum complemento intercapedinis duorum locorum arealiter tabule immittas ex quo quod in latere earum descendenti occurret ex nonaginta gradibus abiecto reliquum dedimus complemento latitudinis loci primi si tamen ipse primus borealior secundo extiterit aut ex eodem complemento demas si secundus borealior fuerit quod cum hac lege compensabitur inventum secundum appellabis. Cum complemento itaque talis inventi secundi ac complemento inventi primi tabulam nostram lateraliter ingredere reperies namque in angulo communi latitudinem secundi loci quesitam. Cuius deinde

Longitudo et latitudo Rome

Nurembergae longitudo et latitudo

80 miliaria ytalica unum gradum conficiunt

15 miliaria germanica unum gradum debent

xlvi

Latitudinis complementum cum invento primo tabule immittas areatim. Nam in latere rubro descendenti habebis differentiam longitudinum duorum locorum qua adiuncta longitudini primi loci si positio secundi orientalis fuerit respectu primi aut ex eadem minute si occidentalis extiterit quodque sic agendo emerget longitudinem secundi loci manifestam reddet. Angulum autem positionis de quo superius mentionem fecimus prope modum sic explorabis. Iuxta lineam meridianam in plano quopiam adeque distantiam orizontis posito super aliquo eius puncto tanquam centro describe circulum qui in 360 equas partitus ut assolet dividatur. Centro autem talis circuli filum adhereat quod extendatur quam rectissime adversus secundum locum ita ut dissecet circumferentiam descripti circuli. Nam arcus eius circuli inter filum et lineam meridianam tue regionis comprehensus angulum positionis representabit. Ymmo quoque rectior fuit uter duorum locorum horizon altero existat. Verum si angulus talis cognitus fuerit intercapedo quidem locorum utre inventi primi querebitur complementum aut latitudinis primi loci proinde quasi inventum secundum erat. Tuo certa latitudinem primi loci cum complemento intercapedinis lateraliter tabule immittas mox cum eo angulo communi habebis latitudinem loci secundi. Cuius deinceps complementum cum intercapedine lateraliter areatim in tabulam traductis ut invenies ruber in latere descendenti oriens differentiam longitudinum quesitam demonstrat. Contingit preterea inveniri secundum numerum esse quadrante circuli et ubi invenerit locus primus latitudinem aquilonarem obtinuerit secundus australem ab equinoctiali circulo latitudinem sortietur tenore quodam supputationis eo modo qui ab initio traditus est. Exempla producturum latitudo habitationis mee gradus 48 complectitur volo scire latitudinem regionis cuiuspiam recte ad austrum sub meridiano meo iacentis cuius et pedis mei intervallum habet 2000 stadia. Facta itaque divisione stadiorum 2000 per 200 tot enim stadia uni gradui secundum Eratosthenem debentur exeunt 10 gradus intercapedinis quos aufero ex 48. Quoniam locus ille secundus ad austrum vergit et relinquuntur 38 gradus quibus vertex talis loci ab equinoctiali circulo removetur. Nunc ponatur secundus locus orientalis et austrinus sitque angulus positionis 34 graduum locorum autem intercapedo quanta prius 10 graduum. Hos igitur gradus 34 et illos 10 lateraliter intra tabulam dirigenti mihi offertur inventum primum 11. 23. Cuius deinde complementum 78. 37 cum complemento intercapedinis 80. 0 areatim secundum missa in tabulam transferendo eliciuntur 81. 31. Cuius numeri complementum 8. 29 adiungo complemento latitudinis prime quod est 42. 0 quoniam secundus locus ad austrum vergit ut concrescat inventum secundum 50. 29. Cuius item complementum 39. 31 cum complemento inventi primi 78. 37 lateraliter in tabulam missa eliciunt latitudinem secundi loci 39. 17. Cuius postremo latitudinis complementum 50. 43 cum invento primo 11. 23 areatim tabule inferendo extrahitur differentia longitudinum 7. 28 que addita longitudini prime regionis conflabit longitudinem secundi loci. Supputationes autem reliquorum casuum missas facio quoniam priorum penitus similes existunt. Nunc circa maiorem eclipsium paucula quedam problemata introducimus.



## Diversitatem aspectus lune in circulo altitudinis perquirere

Cui prerequirenda est diversitas aspectus maxima ad certum situm qua videlicet luna sortitur in orizonte existens. Eam itaque diversitatem aspectus cum distantia globi lunaris a vertice atque complemento altitudinis sue supra orizontem lateraliter in tabulam mittendo exquires diversitatem aspectus lune in circulo altitudinis que querebatur. Nam aliter eliceas diversitatem aspectus solis si prius maximam eius diversitatem in orizonte cognoveris. Hec ratio si ad solem exercita fuerit satis recta procedet. In luna autem si posueris remotionem a vertice 64 graduum superius calculus a vero deficiet in dimidia pene minutia unius gradus quam fallaciam sibi declinare libeat diversitatem aspectus lune cum indeterminatam distantie lunari a vertice capitis superadde et congesto numero utere unde quasi distantia globi lunaris a vertice capitum. Huc res numerali exercitio ante oculos ponetur.

Angulus positionis

Sit distancia lune a vertice capitis 24 graduum. diuersitas autem aspectus maxima in orizonte ad centrum lune situm spectans 1.2 quero diuersitatem aspectus ad memoratam distanciam lune a puncto verticali ingredienti itaque michi tabulam lateraliter cum 24 gradibus distancie a vertice capitis et uno gradu ac 2 minutis diuersitatis aspectus offertur more solito numerus ille 24.16 quem si demerer tractaturo tanquam diuersitatem aspectus precisissime exquisitam nullo errore sensibili supputacio contaminabitur. Verum si exactiorem desideres calculum diuersitatem aspectus iam nunc undecunque inventam adicias distancie lunari a vertice que erat 24.0 sic quod consurgat noua quedam distancia a vertice 24.16 cum qua et diuersitate aspectus 1.2 lateraliter tabulam intrando aucupabor diuersitatem aspectus 24.24 aut si curiosius placet extricatus procedam hoc pacto. Quoniam numerus ille 24.24.16 imperfecte conflatus est in fronte tabule generalis quoniam habet minucias aliquas quas prorsus omisi gradus duntaxat integros 24 duco lateraliter in tabulam cum diuersitate aspectus orizontalis. elicio que non aliter quam antea 24.16. deinde cum 26 gradibus in fronte pagine acceptis et diuersitate aspectus maxima 1.2 eodem modulo supputacionis exeudo 26.3. Inter hunc autem numerum et superiorem differenciam reperitur 27 quam una cum minucijs numeri frontalis 24.16 lateraliter transferendo in tabellam manualem Unde libet assolet exemplo 34 secundas minucias que adiuncte diuersitati aspectus primum elicite id est 24.16 conficient 24.41 diuersitatem aspectus quesitam. Et si racionem sinuum et arcuum sectatus fuero elicitam 24.40 qui quidem numerus a priori calculo minima quadam differenciola recedit

## Problema xlviij

Diuersitatem aspectus lune tam in longitudine quam in latitudine perscrutari. Intra lateraliter cum angulo latitudinis et diuersitate aspectus lune in circulo altitudinis quod cum in area tabule offenderis erit diuersitas aspectus in latitudine quam querebas. Non aliter inuenies diuersitatem aspectus in longitudine si cum angulo longitudinis dicta quoque diuersitate aspectus lune in altitudine lateraliter tabulam ingressus fueris. Angulus autem latitudinis forme sic agnoscetur. Si punctus ecliptice qui lune locum prebet in quadra ecliptice occidentali fuerit Angulus per vigesimum secundum problema inventus dicetur angulus latitudinis. Si vero fuerit in quadrante orientali ecliptice angulum ex circulo ecliptice et circuli altitudinis prouenientem ex 180 gradibus demas sic namque angulus latitudinis notus relinquetur. Cum autem angulum in latitudine si rursus ex 90 gradibus tollas restabit angulus longitudinis. Et si huiusmodi punctus ecliptice pari intervallo ab horoscopo cardine quoque occiduo remouebitur angulus quidem latitudinis erit rectus. Angulus autem longitudinis nullus habebitur atque adeo diuersitas aspectus in circulo altitudinis erit et diuersitas aspectus in latitudine nulla prorsus diuersitate longitudinis existente. Exemplum de diuersitate latitudinis cuius angulus supponatur 42.2 diuersitas autem aspectus in circulo altitudinis 0.39. Ingredior itaque tabulam lateraliter primo quidem cum 42 gradibus et 0.39 elicio que numerum hunc 0.30.22. deinde vero cum 43 gradibus et 0.39 similiter agendo numerus ille 0.31.9 offertur cuius et preditti differenciam 24 cum 2 minucijs numeri frontalis in latera tabelle manualis traducendo experiuntur 15 que addito numero primo per tabulam extracto puta 0.30.22 conficiunt 0.31.2 diuersitatem aspectus in latitudine quesitam. Hanc quoque formulam tenebis in diuersitate longitudinis amplectenda assumpto videlicet angulo longitudinis

## Minuta casus in defectione solari supputare xlix

Sub aggregato semidiametrorum solis et lune in fronte tabelle manualis accepto quere latitudinem lune visam ad horam medie defectionis et numerum ex directo eius in latere repertum quare demereris in area tabule generalis

qm sy.22 problematis reperitur

iuxta unum gradum lateris dextri descendentis quo precise invento aut ei pro-
pinquissimo numerum in fronte tabule scriptum ex quadrante aufer residu-
um autem cum congerie semidiametrorum lateraliter in tabulam mittas ha-
bebis enim in angulo communi ut assolet minuta casus quesita. Post
huiusmodi rationem exercitus in congerie semidiametrorum umbre et lu-
ne ac vera latitudine lune in medio defectionis lunaris eius minu-
ta casus et dimidie more comunitim si moram habuerit eclipsis lunaris
aut minuta casus sola si nullam in umbra moram luna fecerit. Cuius
quidem rei iudicium hac formula traditur. Subtracto semidiametro lunari
ex semidiametro umbre si residuum superaverit latitudinem lune quam
prebet tempus vere oppositionis luminarium moram procul dubio
futuram dices. Si vero tale residuum latitudini lunari fuerit equale luna
tota quidem obscurabitur sed mox ex umbra emerget. At si memorata differe-
ntia semidiametrorum latitudine lunari minor fuerit pars duntaxat glo-
bi lunaris deficiet atque ideo moram in umbra habebit nullam. De-
fectione itaque moram accipiente si differentiam semidiametrorum lune et
umbre cum latitudine lunari in tabulas miseris quemadmodum antea con-
gerıem semidiametrorum cum ipsa latitudine habebis minuta dimidie
more que ubi ex summa minutorum casus et dimidie more dempseris
relinquent minuta casus seorsum accipienda. Spectat autem in primis
explorari sit ne futura defectio utriusque luminarium an non quod nem-
pe hoc pacto cognoscendum exhibemus. Si congeries semidiametrorum vi-
sualium solis et lune superaverit latitudinem lune visam que tempore visibilis
coniunctionis invenitur luminare maius procul dubio deficiet. Si autem
equalis ei latitudini vise aut minor extiterit sol purus in orbe ni-
tebit. Veruntamen equalitas dicte summe semidiametrorum et latitudi-
nis vise lunaris globus luminarium ad eandem radiosam lineam soli-
lo incidentem correbit non aliter ad lunam speculabimur. Nam si
congeries semidiametrorum lune et umbre latitudinem lunarem qua prebet
tempus veri plenilunii excedit, munere fraterno spoliabitur aurea Phe-
be. Si vero memorata congeries latitudinem talem equaverit, fronte
una hilaris tanget vix atra Diane. Exemplaris autem numerandi
rationem re reddet. Sit congeries semidiametrorum visualium solis et lune
32 minuta minutie unius gradus. Latitudo autem visa lune ad visibi-
lem coniunctionem 27 minuta complectatur. In tabella itaque manuali
sub 32 minutis invenio 26. 40 et e directo sinistrorsum 40 minuta re-
stant ad hec 20 secunde quoniam 27 minuta sunt in numero latitu-
dinis sed 20 secunde sub 32 in latere tabelle reddunt 37. sic quod colligun-
tur 40. 37. Hunc numerum quero in area tabule generalis iuxta unum
gradum sub 47 gradibus numeri frontalis apud unum gradum lateris
sinistri reperio 40. 19 sub 48 autem gradibus video 40. 13. Hunc secun-
do numerus meus videlicet 27 est proximior ideo numerum frontalem
45 demo ex 90 gradibus et relinquuntur 22 quas cum 0. 32 id est aggrega-
to semidiametrorum lateraliter in tabulam mittens clico minuta casus
16. 15. 48. Verum si curiosius supputare libeat cum numerus iuxta
unum gradum accipiendus non sit scriptus in una tabula sed superest
eum qui sub numero frontali 47 reperitur puta 40. 19. in hiis secun-
dis differentia autem lateralis iuxta unum gradum est 38 hoc modo
procedam. In tabella manuali sub 38 secundis quero hiis secundis
et ex directo earum in latere tabelle invenio 32 minutias primas
que adiungende sunt 47 gradibus in fronte tabule occurrentibus. Hunc
itaque numerum 47. 32 minuo ex 90 et relinquuntur illa 42. 28. cum
quo demptis et aggregato sic semidiametrorum procedo ut supra.
Hec quidem ad defectionem solarem spectant. Nam in lunari obscuratio-
ne postquam numeros introitibiles quemadmodum ante hac monuimus
didicisti nulla prorsus diversitas est nisi quod congeries semidiametrorum
lune et umbre quandoque superat unum gradum. Adeo quod frontem in
manualis tabelle ad 60 minutias unius gradus extendimus ne mi-
nus varia numerorum denominatio supputatori turbinem aliquam infer-
ret. In hiis autem supputationibus diversitatis aspectus et minutorum
casus contingit sepenumero alterum numerorum introitualium esse
minorem uno gradu hic itaque reliquum quere in fronte tabule gene-
ralis et in ea pagina numerus inferius iuxta unum gradum reperies

18

Eclipsis ... 

Eclipsis solis

... eclipsis

Cum numero introituali parumlo lateraliter in tabellam manualem mittatur
Namque in angulo communi colligetur numerus quesitus. Porro si numerus fron
talis minutiam habuerit sive numerus introitualis parumlus uno gradu
minor sive maior eo fuerit predictum opus ingeminandum erit pro pri
mo quidem per numerum frontalem minutia sua pretermissa agendum
est. Deinde vero per numerum integrum proximo maiorem differentia
autem numerorum elatorum ex minutia numeri frontalis lateraliter in
tabellam manualem transferatur quod si in angulo communi ut assolet col
ligetur addendum est primo numero per tabulam elato Problema 2.

## Initium flexionis tenebrarum in eclipsibus determinare

Initium flexionis huiusmodi queritur in
circumferencia orizontis ad quod stabiliter vergit circulus ma
gnus per centra luminarium in defectione solari aut per
centrum lune et centrum circuli umbre in lunari transiens qui quidem
circulus magnus obeam rem potest vocari circulus flexionis. Per
punctus investigari solet ad principium et finem defectionis. Principium ad
initium et finem more si quam habet eclipsis lunaris ut sciatur
in quo puncto limbi utriusque luminaris et prima defectio et postre
ma eveniat idest more astronomorum loquendo ubi primum aut po
stremum circuli luminarium in solari quidem obscuracione aut cir
culus lune circulusque umbre in lunari defectione se se contingent
quod prius fieri accidit per sensibilem prospectum cernendum est et nobile
mirum in modum plurimum admiracionis prebet qui tenebrarum magnitu
dinem atque duracionem prenunciare. In primis itaque explorandum est
habeat ne luna latitudinem ea hora qua queritur flexionem tenebra
rum an non. Si enim latitudine caruerit punctum flexionis erit caput
horoscopi aut cardinis occidui tunc videlicet luna vicinior extiterit
Queras igitur ascendens ea hora et amplitudinem ortivam eius punctus
enim hanc ortus amplitudinem terminans voluntati tue satisfaciet quod
et de occidente intelligendum est si luna propinquior ei fuerit quam orienti
Si autem luna habuerit latitudinem aquilonariam queras primo per decimum
nonum problema orizontalem distanciam eius ab oriente equinocti
ali vel occidenti quam peregrino quodam vocant azimuth solis quidem
in eclipsi solari umbrosi autem circuli in lunari. Fiat enim additis in quo
puncto circulus altitudinis solis vel umbre sunt incidit orizonti quod qui
dem punctum propter faciliorem intelligenciam punctum incidencie libet
appellare. Cuius situm diligenter notabis. Cum ab eo inferius computa
bitur arcus quidam ad punctum flexionis. Deinde postea ex supradictis
ad horam consideracionis tue quere angulum quem continet circulus alti
tudinis cum ecliptica apud locum verum solis quidem in solari defectio
ne. Umbre autem idest puncti qui per diametrum soli opponitur in lunari
obscuracione ex qua demum angulo tres alios verticem communem ha
bentes cum dicto angulo faciliter agnoscis. Nam si angulum huiusmodi
borealem atque orientalem. Cuius magnitudo per vicesimum secundum
problema deprehenditur ex 180 gradibus demseris relinquetur an
gulus borealis occidentalis. Angulus autem meridianus occidentalis
equaliter angulo boreali orientali et angulus meridianus orientalis an
gulo boreali occidentali reperitur equalis. Hos quatuor angulos nota se
orsum cum suis denominacionibus. Altitudo demceps solis vel circuli um
brosi invenienda est ad horam consideracionis tue. Quibus rebus sic dis
positis accipe duos numeros introituales quorum unus sit latitudo lune
visa in solari quidem defectione aut latitudo lune vera in eclipsi lu
nari. Alius autem sit congeries semidiametrorum visualium solis et lune
tam in principio quam in fine eclipsis solaris aut aggregatum semidia
metrorum lune et umbre in principio et fine eclipsis lunaris. In princi
pio autem more et fine eius aufer semidiametrum lune ex semidiametro
umbre et residuum pro secundo numero introituali serva. Horum itaque
maiorem queras in fronte tabelle manualis. Minorem vero directe
sub eo et numerum in latere sinistro collectum accipe. Demceps in
area tabule generalis iuxta unum gradum lateralem quo precise in
ventus numerus in fronte tabule secernens angulum flexionis repre
sentabit quem videlicet circulus flexionis cum ecliptica continet. Si
vero cum neutrum in tabula offenderis accipe numerum maiorem pro
ximo minorem uno gradui appositum cum et numeri tui differenciam

quere in arca tabelle tabelle manualis sub differentia transuersali inter communem gradum repertum numerati que in latere tabelle ablatis numero frontali cui uigor graduus subiaceat adiungas ut concrescat angulus flexionis quesitus quem deinde conferas ad angulum borealem occidentalem si ad principium eclipsis uel totalis obscurationis computum feceris. Nam si angulus flexionis fuerit equalis ei ad quem confertur punctus flexionis idem erit cum puncto medientie. Si autem duo anguli inuicem collati inequales extiterint alterum ex altero minore numerum que residuum in complemento altitudinis solis aut circuli umbrosi simpliciter tabule committas in complemento eius quod in angulo communi offertur cum complemento residui paulo antedicto arcatim in tabulam ducas arcum que in latere descendenti oblatum ex quadrante minuas sic cum relinquetur numerus puncti flexionis quesitus producens. Quem igitur numerum computa in orizonte ad principium quidem eclipsis uel totalis obscurationis a puncto medientie supius notato orientem uersus si angulus flexionis minor fuerit angulo boreali occidentali aut occidentalem uersus si maior eo fuerit. In fine autem eclipsis et totalis obscurationis quemadmodum residuum arcum computa in orizonte a puncto medientie aduersus occidentem si angulus flexionis minor fuerit angulo boreali orientali aut uersus orientem si maior eo fuerit. Sic namque perducens ad punctum flexionis quesitum ubi inde fuerit punctus et circulus flexionis mediat orizontem. Et si meridianam latitudinem luna sortitur inuenies omnibus ut supra expositum est usque ad angulum flexionis ipse angulus flexionis in principio quidem eclipsis et totalis obscurationis conferri debet ad angulum meridianum occidentalem eundemque secundum. In fine autem ad angulum meridianum orientalem. Reliqua uero cetera absoluenda sunt quemadmodum supra monitum est. dicitur numeratur ultimos arcus in orizonte computandi a puncto medientie. Cum igitur arcum in principio eclipsis uel totalis obscurationis numerabis a puncto medientie uersus occidentem si angulus flexionis minor fuerit angulo meridiano occidentali aut ab eodem puncto orientem uersus si maior fuerit eo. In fine uero eclipsis et totalis obscurationis dictum arcum computabis a puncto medientie uersus orientem si angulus flexionis minor fuerit angulo meridiano orientali aut uersus occidentem si maior eo fuerit. Hac enim parte offendes punctum flexionis quesitum.

Sed illud non est secordia pretereundum postquam angulum flexionis cum aliquo angulorum ecliptice et circuli altitudinis sicuti precepimus subtraxeris si residuus nobis quadrantem equauerit numerus quemque in orizonte a puncto medientie computandus nonaginta gradibus complectetur. Ibi igitur siue ad orientem siue ad occidentem computetur in puncto flexionis desinet quando quidem circulus flexionis in orizonte coire solet in duobus punctis per diametrum oppositis. Si uero talis numerus residui unius quadrantem superauerit summam numeri a puncto medientie computandi alterum extendes. Nam si secundum expositam doctrinam numerus ille ad orientem supputandus erat tum occidentem uersus dirigetur et uiceuersa si primus ad occidentem tunc orientem uersus extenditur. De flexione uero tenebrarum sufficere nunc uidentur hec pauca. Nam si ad unguem omnia ad presens negotium spectantia exstruere pergat quispiam non tam commodus uidebitur quam onerosus quippe cum in presenti traditione perinde locuti simus quasi soli deficienti nulla prorsus latitudo inesse accidat neque item luna neque circulus umbrosus ullam habeat diuersitatem latitudinis quod profecto aliter euenire necesse est. Sol etenim numquam sub ecliptica uidetur nisi uerticem emisperii superioris occupet. Lunam autem plerumque pati diuersitatem aspectus in latitudine atque idcirco aliam quidem esse ueram aliam autem uisam latitudinem neque uulgares quidem ignorant astronomi quod et de circulo umbre non minus cunctandum est quoniam equalem pene cum lune centro nisus habeat commotionem. Verum hec atque alia eiusmodi uel nihil uel parum errores sensibiles operi tam diudum exposito poterunt immiscere. In exemplari supputatione facilius forsitan intelliges. Supponatur aliqua defectio solaris in regione nostra in cuius fine sol distet a meridiano orientem uersus per spatium .2. horarum equalium quamobrem eleuatus eius supra orizontem .2. 26. distantia autem orizontalis ab oriente equinoctiali .8. 21. ad meridiem. Angulus borealis orientalis quem continet circulus altitudinis et cum ecliptica in loco solis concurrentis .122. 38. borealis occidentalis .47. 22. Meridianus occidentalis .122. 36. meridianus orientalis 47 22. Verum tamen in presenti casu borealis orientalis duntaxat cognitu necessarius erit. Ponimus enim latitudinem lune uisam

Meridianus orientalis .47. 22.

borealem 27 minutiarum unius gradus. Congeries deinde semidiametrorum corporalium solis et lune 32 minutias unius gradus complectitur sub qua quidem congerie in fronte tabelle manualis accepta quero latitudinem lune visam et e directo eius in duobus locis accepte colligo 40. 38. Hunc autem numerum nusquam invenio iuxta unum gradum tabule generalis sed proximo minor ei offertur michi 40. 19 sub numero frontali 47. Inter 40. 19 autem et 40. 37 differentia cadit 18 quam quero in tabella manuali sub 38 secundis differentie transversalis iuxta unum gradum posite et e directo eius in latere descendenti offendo 32 minutias quas adiungo arcui frontali 47 graduum antea servato et concrescit angulus flexionis 47. 32. Huiusmodi igitur angulum minuo ex angulo boreali orientali 122. 38 et quod manebit numerus residuus 64. 6 quem cum complemento altitudinis solaris 44. 18 lateraliter in tabulam transferenti michi offertur arcus ille 28. 10 cuius demum complementum 61. 40 cum complemento numeri residui antiquo inventi 25. 42 arcum in tabulam ducendo eliminatur 39. 9 quem ex quadrante sumptum relinquunt 40. 41 arcum videlicet qui a puncto medio celi occidentem versus connumerari debet. Talis autem medie celi punctum ab oriente equinoctiali ad partem meridiei distabat gradibus 8 et 21 minutiis quibus si adiecero 40. 41 conflabitur arcus 49. 12 idest remotio puncti flexionis ab oriente equinoctiali. Verum si libeat tale punctum flexionis ad meridianum referre cum inter circulum equinoctialem et meridianum quadra circuli iaceat si memoratum numerum 49. 12 ex 90 gradibus abstuleris habebis in residuo 40. 48 arcum videlicet orizontis qui inter meridianum et punctum flexionis comprehenditur. Is igitur a meridiano decurrens ad orientem flexionis punctum indicabit. In aliis autem casibus nisi allectore sit ingenio nunquam postulabis exemplarem calculum cum ex iam memoratis brevi quodam diverticulo si quid variatur est aucupari possis. Nunc demum de declinationibus ac celi mediationibus ceterisque huiusmodi passionibus stellarum libet incumbere.

## Problema 21

Cognito loco vero stelle sive fixe sive erratice necnon eius latitudine declinationem suam ab equinoctiali circulo scrutari. Si locus stelle verus secundum longitudinem in altero duorum punctorum tropicorum fuerit declinationem talis puncti tropici et latitudinem stelle si pari denominatione fuerint congrega aut alteram ex altera deme si diversa cognomenta susceperint sic enim declinatio stelle prodibit nunquam mutatura nomen eorum arcuum ex quibus nascitur nisi quando per subtractionem distantur tunc enim maior arcus denominationem suam tribuit relicte declinationi. Rursus aut punctorum equinoctialium stelle locum prebente intra lateraliter cum latitudine stelle et complemento maxime declinationis solaris. Inveniens enim in area tabule occurrens quesitam prebebit declinationem eius quidem denominationis cuius latitudo et ipsa erat. Si vero alium locum stella obtinuerit distantiam eius a capite cancri aut capricorni utri scilicet vicinior fuerit cum maxima declinatione solari lateraliter in tabulam mittas quadrans angulus communis offeret inventum primum nominabis. Deinde a reatim intrediaris tabulam cum complemento huius inventi primi et complemento maxime declinationis solaris. Nam eo quod latus rubrum descendens dabit ex 90 gradibus dempto residuum differentie gratia nominabis invenitur secundum boreale quidem si borealis ecliptice medietas locum stelle prebuerit australem vero si reliqua ecliptice semicirculus stellam gesserit. Huiusmodi igitur inventum secundum latitudo que stelle in unum congregentur si eadem denominatione fuerint aut alterum ex altero auferatur si diversas sortiantur denominationes. Quod que alterutro modorum elicitur argumentum declinationis appellari licet. At id aut argumentum si ex collectione natum fuerit denominationem suarum partium suscipiet. Nam si per ablationem minoris ex maiore relinquetur denominationem maioris ei debetur. Deinde cum eo argumento declinationis et complemento inventi primi tabulam lateraliter ingredere. Mox enim in area eius ut assolet venaberis declinationem stelle quesitam eadem utique denominatione qua fuit argumentum eius. Et si nullum evenerit argumentum declinationis dum videlicet

inventum secundum et latitudo stelle eundem quidem numerum diversas autem denominationes possident nullam quoque denominationem stelle prominaalibus | declinationem

Quicquid autem hactenus de stellis tradimus aliisquoque celi punctis quibuscunque accomodari poterit modo longitudinem quidem in ecliptica latitudinem vero ab eadem habeant cognitas Stelle pretereo aut puncto celi quilibet latitudinem nullam habenti eam tribuas declinationem quam locus eius in ecliptica obtinet Preterea inventum secundum alii dicunt hac lege distanciam stelle ab alterutra sectionum equinoctialium perinde quasi ascensionem rectam accipiunt et ei arcum ecliptice debitum per tabulam ascensionum rectarum assignant quo cognito quam tam declinationem finis eius arcus scrutatur explorant numerus cum talis declinationis ostendit porcionem circuli latitudinis inter equinoctialem et eclipticam comprehensam que paulo superius inventum secundum appellabitur Neque eam inepte radicem declinationis quispiam cognominabit Verumque utique viarum diversas michi ea refert est cum omnis in presenciarum non quascunque vias ad propositum quodlibet ducentes monstrare sed usum tabule generalis quam paucissimis verbis explanare Nam in exemplo videamus Stella quedam locum longitudinis habeat in principio arietis cum declinatione boreali sex graduum cuius declinationem scrutabor Hac via complementum maxime declinationis solaris. 66. 30. cum latitudine memorata lateraliter in tabulam transferendo offertur more pervulgato numerus ille. 4. 30. qui notificat declinationem quesitam borealem quidem quoniam et latitudo stelle ad septentriones vergebat Sed esto locus veneris cuiuspiam stelle secundum longitudinem in quinto decimo gradu tauri qui habebat latitudinem aquilonarem septem graduum quero declinationem eius ab equinoctiali circulo distanciam itaque loci eius a capite tauri que est. 24. 0. cum maxima obliquatione solari. 23. 30. mitto lateraliter in tabulam ut dictum inventum primum. 16. 23. cuius deinceps complementum. 73. 37. cum complemento maxime obliquacionis solaris. 66. 30. areatim in tabulam ducenti michi tantus offertur arcus. 72. 44. cuius residuum de quadrante. 17. 4. vero inventum secundum Boreale quidem quia semicirculus ecliptice borealis locum stelle prebeat cui rursus invento latitudinem stelle borealem addidi ut concrescat argumentum declinationis boreale. 24. 4. quod tandem cum complemento inventi primi. 73. 37. lateraliter transferendo in tabulam excudo declinacionem stelle aquilonarem. 23. 3. In aliis denique casibus pari prorsus formula procedendum est nisi quod argumentum declinationis ex invento secundo et latitudine stelle multifariam nasci solet que res cum antea satis figurata est cum facilis admodum censetur Problema. 57.

## Punctum ecliptice cum quo stella quelibet celum mediat commonstrare

Quecumque stellam in altero punctorum tropicorum sibi locum deligit non aliud celi mediationis punctum expectat quam locum suum verum in ecliptica Alibi autem si quepiam stella constituatur arcum ecliptice in loco eius desinentem perinde quasi ascensionem rectam intellige arcum quoque ecliptice tali ascensioni debitum ex superioribus addisce qui quidem arcus haud absurde nuncupabitur radix ascensionis eam serva diligenter deinde non aliter quam in precedenti dictum inventum primum intrando tabulam lateraliter cum maxima declinatione solari et distancia loci stelle a cancro vel a capricorno utri scilicet vicinior fuerit tale deinceps inventum primum cum complemento declinationis stelle areatim in tabulam mittendo excipietur inventum secundum quod rursus cum argumento declinationis stelle lateraliter in tabulam transfer arcum quoque in area repertum qui a plerisque appellatur differencia transitus stelle per celi medium adde radici ascensionis ante hac servato si semicirculus ecliptice descendens locum stelle prebuerit et declinatio ipsius stelle fuerit borealis aut locus stelle in semicirculo ascendente datus fuerit cum declinatione meridiana Talem vero differenciam transitus aufer a radice ascensionis si locus eius in semicirculo ecliptice descendenti reperiatur et declinatio stelle australis fuerit aut stella mediationem celi ascendentem possideat cum declinatione aquilonia Hac cum additione vel ablatione facta res po

Postulat invenietur ascensio recta ad eum ecliptice punctum spectans qui cum stella data celum mediat per quam deinde rectam ascensionem punctus ecliptice quesitus modo supradicto investigabitur. Porro si autem ex tali addicione plures quam 360 gradus excreverint circulus unus est reiciendus. Quando vero ex radice ascensionis memorata differencia transitus auferri nequit numerus tocius circuli adnectendus est ut ex summa conflata possit fieri subtraccio. Illud denique non est ignorandum quod altero punctorum equinoctialium stelle locum prebente maxima quidem declinacio solaris pro invento primo latitudo autem ipsius stelle cuiuscumque denominacione fuerit pro argumento declinacionis sumenda est. Porro si centrum stelle sub ecliptica positum fuerit non quesitum erit aliud ecliptice punctum quam cum ipsa stella celum mediat preterquam id sub quo stella ipsa constituitur. Contingit preterea argumentum declinacionis superare quadrantem circuli tunc itaque numerus postremo per tabulam elicitus a semicirculo auferendus est ut relinquatur differencia transitus per celi medium nec quam deinde procedendum est uti supra monuimus. Cum si tale argumentum declinacionis quartam circuli equaverit differencia quoque memorata a quadrante non discrepabit. Sed si divertamus ad numeros exemplares volo scire nunc quo puncto ecliptice ea stella celum mediat quam supra posuimus in quintodecimo tauri in latitudine boreali septem graduum. Pongo itaque distanciam loci stelle a capite arietis idest 45 gradus tanquam ascensionem rectam cui de ecliptica debetur ille arcus 47. 24 quem vero radicem ascensionis. Deinde distanciam loci stelle a capite cancri idest 45 gradus cum maxima declinacione solari 23. 30. lateraliter in tabulam ducendo elicio inventum primum 16. 23. quod rursus cum complemento declinacionis stelle 66. 47. arcatim in tabulam mitto ut emergat inventum secundum 17. 40. cum quo demum ac argumento declinacionis 24. lateraliter tabulam intrando excipit numerus ille 7. 11. idest differencia transitus stelle per celi medium quam aufero ex radice ascensionis 47. 24. quemadmodum posicio stelle exigit et relinquitur ascensio recta 40. 13. ad punctum quesitum spectans cui quidem arcus ecliptice dare debetur 42. 46. a capite arietis sumendo inicium idest 12. 46. tauri punctus itaque eius ecliptice arcum terminans ad celi medium una cum stella proposita pervenire solet

Problema .xiii.

# Declinacionem stelle cuiuslibet aliter quam ante hac traditum est indagare

Si verus stelle locus fuerit in altero punctorum equinoctialium intra ut prius lateraliter cum latitudine eius et complemento maxime declinacionis solaris. Nam in angulo communi habebis declinacionem stelle quesitam eiusdem denominacionis cum latitudine sua. Si autem dimidium ecliptice borealis stelle locum prebuerit intra lateraliter cum complemento latitudinis et distancia stelle ab inicio cancri quodque angulus communis offerat inventum primum nominabis. Deinde arcatim ingredere cum complemento eius inventi primi et latitudine stelle eo namque quod in latere rubro descendenti accipies ex nonaginta gradibus ablato residuum appellabitur inventum secundum quod demum confer ad maximam solis declinacionem. Nam si fuerit equale ei et latitudo stelle septentrionalis extiterit deme inventum primum ex quadrante et residuum pro declinacione stelle teneto. Si vero hec duo invicem collata fuerint inequalia alterum ex altero deme et residuum serva. Latitudine autem meridiana existente inventum secundum semper appone maxime solis declinacioni quodque hoc pacto vel remanebit demendo vel conflabitur adiungendo sicuti res postulat argumentum declinacionis nuncupetur boreale quidem semper quando latitudo stelle ad septentriones vergit dum autem latitudo stelle austrina supponitur varium erit iudicium. Nam si argumentum declinacionis quadrantem circuli superaverit ipsum adhuc boreale censebitur. Si autem citra quadrantem manserit meridiano donabitur cognomento. Complementum igitur huiusmodi argumenti cum complemento primi inventi tabule lateraliter immittas. Numerus enim arealis more per vulgato dictus declinacionem ostendet quesitam borealem quidem si argumentum sepe memoratum tale fuerit austrinam vero si illud austri prinupse

Rit agnominacionem / uerum argumento tali nonaginta ad unguem gradus
complectente nulla prorsus stelle tribuetur declinacio. Ut si australem e:
clyptice semicirculum stella possederit intrabis lateraliter cum distancia eius
a capite capricorni et complemento latitudinis stelle Angulus enim commu
nis inventum primum velud superius tibi reddet. Cuius demceps inventi
complementum cum latitudine stelle areatim in tabulam mittas quodque
in latere rubro descendenti oblatum fuerit ex quadrante minvas et re
linquatur inventum secundum cui rursus maximam solis declinacionem
semper addicias dum latitudo stelle septentrionaria extiterit si aut meri
diana fuerit latitudo ipsum inventum secundum ex maxima solis de
clinacione reicias aut econtra maximam solis declinacionem ex invento
secundo quodque vel collectum fuerit aut residuum prout qualitas negocii
portatur vocabis argumentum declinacionis meridianum quidem semper
quando latitudo stelle meridiana supponitur latitudine aut boreali
subducta si tale argumentum quadrantem circuli superaverit meridianum
item habebitur si vero minus quadrante fuerit boreale suscipiet de
nominacionem. Complementum igitur talis argumenti declinacionis cum
complemento inventi primi tabule lateraliter immittas quod enim in an
gulo communi videbis erit declinacio stelle quesita eius quidem deno
minacionis qua argumentum declinacionis habebat. Verum si inventum
secundum equale esset maxime declinacioni solis latitudo quoque stelle meridi
ana dempto invento primo ex 90 gradibus relinqueretur declinacio
stelle australis porro argumentum declinacionis quadrantem circuli preter co
plectens stellam ab equinoctiali circulo nequaquam recedere permittet. Exem
pli gracia reponatur stella posita in quindecimo thauri gradu existens
ad septentrionem remota septem gradibus distanciam eius a capite can
crino 14 gradinum cum complemento latitudinis 83 0 iuxta tenorem
precepti lateraliter in tabula mittens excipio inventum primum 22 3 2
cuius complementum 64 26 cum latitudine stelle 7 0 areatim deinceps
in tabulam ducendo dicantur 9 41 qui ex quadrante summoti relinquit
inventum secundum 80 9 ex quo demam maximam solis obliquacio
nem 23 30 ut remaneat nobis ille 46 39 quem vocabo argumentum
declinacionis boreale quidem quod stella sita in dimidia ecliptica borea
li optinet latitudinemque borealem huius complementum 33 21 cum complemento
inventi primi 64 26 lateraliter in tabulam transferenti michi exhibetur
declinacio stelle 23 3 septentrionaria quoniam argumenti declinacionis a
septentrionibus denominatus est Rursus ponatur stella quarta in medio thauri se
cundum longitudinem ut supra cum latitudine australi 7 graduum
Cum igitur in hoc casu numeri intervitales primi sint equales prioribus
inventum primum ut antea erit 22 3 2 Pari quoque racione inventum se
cundum repetetur 80 9 Verum tale inventum secundum maxime de
clinacioni solari adiungens stellam meridianam obtinente latitudinem
surgat concrescet argumentum declinacionis 103 39 quodquidem nonaginta
generaliter superat boreale compellabitur cuius deinceps complementum 13
39 cum complemento inventi primi 64 26 lateraliter in tabulam ducenti
michi offertur declinacio stelle 9 10 boreali denominacione qua et
argumentum declinacionis erat. Ceteri casus exemplari calculo non ege
bunt si que iam dudum tractavimus revolvere non pigeat. Habes fidei
amice geminas declinacionis supputande formulas quarum utram ex
ercere velis arbitrio tuo conceditur. Ego si quando usus fuero prio
rem amplecti malim est enim tum breviuscula satis tum certa aliquantum exactior.

## Punctum celi mediacionis alia quadam racione LIIII
## perscrutari

Si locus stelle verus fuerit in principio a:
riectis aut libre intra tabulam areatim cum complemento lati
tudinis stelle et complemento declinacionis eius nam quod in latere rubro
descendenti offenderis ex quadrante summotum relinquet ascensionem recte
arcus ecliptice qui inter locum stelle et punctum celi mediacionis continetur
quem cum duobus ecliptice arcubus utrimque equalibus debeatur explorandum
prius est in utra quartarum ecliptice punctus celi mediacionis existat
talis aut punctus semper erit in medietate zodiaci australi si latitudo stelle
borealis fuerit et econtra in medietate boreali si latitudo stelle australis

exierit. Quo satis comperto ascensio recta per sextum problema ad punctum ecliptice quesitum te perducet. Si autem locus stelle extra duo puncta equinoctialia datus fuerit intra lateraliter cum complemento latitudinis stelle et distantia eius ab alterutro punctorum tropicorum cui vicinior locus stelle vicinior fuerit quadra in angulo communi offendes cum complemento declinationis stelle arcatim in tabulam mittas et eo quod in latere rubro descendenti occurrerit ex nonaginta gradibus reiecto manebit ascensio recta arcus ecliptice qui inter equinoctialem et punctum celi mediationis quesitum concluditur que cum duobus in una medietate ecliptice respondeat arcubus adhuc non erit notum celi mediationis punctum nisi sciatur an ipsum sit in eadem quarta ecliptice cum vero loco stelle an in diversis quod res hoc pacto explorabitur. Si extra a celi cardines stella quas communis constituatur intralis tabulam intrans lateraliter cum complemento maximi declinationis solaris et distantia veri loci stelle ab altero punctorum tropicorum cuiusque quod in angulo communi occurrit complementum cum maxima solis declinatione arcatim tabule immittas et complementum eius quod in latere rubro descendenti colligitur vocabis argumentum locale. Si itaque verus locus stelle fuerit immediate ecliptice boreali et latitudo stelle meridiana exstiterit et quamquam borealis minor tamen argumento locali locus verus stelle et punctus celi mediationis in eadem quarta erunt. Similiter si immediate australi fuerit et latitudo stelle borealis aut si meridiana fuerit minor quidem argumento locali in eadem quarta reperientur dicta duo loca. Si immediate autem boreali si latitudo stelle septentrionalis excesserit argumentum locale aut immediate australi latitudo stelle meridiana superaverit huiusmodi argumentum locale duo loca predicta in diversis reperiuntur quartis alias autem punctus celi mediationis erit initium arietis aut libre. Arietis quidem dum locus stelle verus in semicirculo ecliptice ascendenti fuerit libre autem si reliquus ecliptice semicirculus stelle locum prebuerit. In exemplo retractat memorata stella cum locum declinis in quinta decima parte tauri cum latitudine boreali septem graduum unde et declinatio eius aquilonaris exercebatur 23.3. Igitur complementum latitudinis sue 83.0 cum distantia a capite cancri 44.5 lateraliter in tabulam traducenti mihi exhibetur inventus primum 22.30 quod rursus inventum cum complemento declinationis stelle 66.47 arcatim in tabulam mittendo excipitur numerus ille 49.42 qui complexus ex nonaginta circuli relinquit 40.18 ascensionem scilicet rectam que spectat ad punctum celi mediationis quesitum. Huic autem ascensioni recte a sectione vernali initium sumenti de ecliptica respondent secundum signorum seriem 12 gradus et 26 minute tauri. Contra sub sequentiam vero signorum 17.12 aquarii quamobrem stella proposita cum altero punctorum terminantium arcus predictos celum mediare solet. Sed quoniam latitudo stelle est borealis minor quidem argumento locali veluti iam apparebit necesse est punctum celi mediationis in ea quarta ecliptice offendi in qua et locus longitudinis ponebatur idest in quarta vernali. Punctus igitur fines pervenire 12 gradus et 26 minutas tauri una ad meridianum pervenire cogitur cum stella proposita. Hic ad argumentum locale inveniendum appellatur animo complementum maxime declinationis solaris 66.30 cum distantia loci stelle vera ex cancri capite 44.5 lateraliter in tabulam ferens mox offendo 60.24 cuius complementum 29.34 cum maxima declinatione solari arcatim in tabulam mittendo hic numerum occurret 31.29 cuius complementum 45.29 vocare argumentum locale quod puncto celi mediationis locum definire soleat. Vides igitur ut latitudo stelle borealis septem graduum multo minor est tali argumento atque ideo vero punctus celi mediationis cum vero loco stelle quemadmodum paulo ante diximus eandem ecliptice quadram possidere cogantur.

lv.

## Per datam stelle declinationem punctum que ecliptice cum quo ipsa celum mediat latitudinem suam ac verum locum in ecliptica cognoscere.

De stella sermocinabimur latitudinem habente. Nam eius que non habet frustra queres latitudinem. Notum autem stella quelibet proposita latitudinem habeat per exemplo

[illegible marginal note]

[illegible marginal note]

rabimus. Si declinatio stelle et declinatio puncti celi mediationis equali
numero et pari denominatione fuerint stella absque latitudine sibi locum in
ecliptica delegit in ipso scilicet puncto celi mediationis. Si vero de-
clinationes huiusmodi aut numero equales non fuerint aut denomina-
tione dissimiles stellam verum ab orbita solari discedere non est dubium.
Nunc vero cum altero punctorum tropicorum mediat celum in eadem
quoque latum verum sibi vendicat declinationem aut tales puncti tropi-
ci ad adiunge declinationi stelle si diversarum fuerint denominationum
et conflabitur latitudo stelle non vero declinationis sue servata. Si vero
eadem fuerint denominationis minorem ex maiore tolle et relinquetur la-
titudo stelle cui quidem declinatio tropici si iuncta fuerit cognomentum suum
tradet. Nam si ea vicerit declinationem stelle latitudini contrarium no-
men inculcabit. Et si qua stella cum altero sectionum equinoctialium
ad celi medium pervenire soleat eius illa declinatione nisi exemplo
confectionis eam in ecliptica constitui subtraho te ipso ingenio arbitraberis.
Ad alios igitur stellarum situs examinandos per vicesimum problema an-
gulum meridianum et ecliptice apud punctum celi mediationis provenien-
tem. Postea declinationi huiusmodi puncti celi mediationis declinatio-
nem vero ipsius stelle addiscas que si fuerint eadem denominatione
alteram ex altera minuas et si diversarum extiterint denominationum
eas in unum colliges quodque vel auferendo vel colligendo [illegible] postu-
lat evenit cum angulo prius accepto aut residuo eius de semicirculo
lateralibus tabule immittas. Numerus enim arcalis latitudinem stel-
le quesitam manifestabit. Hec autem latitudo si punctus celi mediatio-
nis fuerit in ecliptica boreali et erit septentrionaria quando declinatio
stelle aquilonia existens superat declinationem puncti cum quo ipsa ce-
lum mediat. Alias autem meridiana producetur. Similiter puncto ce-
li mediationis semicirculum ecliptice austrinum possidente si declinatio
stelle meridiana existens superaverit declinationem puncti celi mediationis
latitudo stelle semper erit meridiana. Alias vero est borealis. Porro nosti-
nam veri loci stelle hoc documento aucupaberis. Ascensionem rectam
que debetur arcui ecliptice inter viciniorem tropicum et punctum celi
mediationis contento cum complemento declinationis stelle lateralibus
tabule inferes quodque in angulo communi ut assolet colligetur cum comple-
mento latitudinis stelle arcatim in tabulam ducendo habebis in latere
descendenti distantiam veri loci stelle ab alterutro punctorum tropicorum.
Nam ergo si fuerit an punctum celi mediationis et locus verus stelle sint
in eadem quarta ecliptice an in diversis locus stelle verus non poterit
ignorari. Item cum imperitiae ex tabula tempore deprehenditur computa-
bis ab ea puncto tropico qui in vero loco stelle eandem ecliptice quartam
obtinet [illegible] verum stelle perdiscens locum. Quartas autem ecli-
ptice nullum accipias facturus et undecumque quartas sed eas dividat
que ad 4 cardines, videlicet duo tropica et duo equinoctialia puncta de-
finiunt. Utrum autem punctus celi mediationis et verus stelle locus sibi
longitudine radiari eandem ecliptice quartam possideant an diver-
sas tali experimento discernimus. Ascensionem rectam qua paulo ante usi
fuimus verba cum complemento maxime declinationis solaris laterali-
bus in tabulam ducens complementum quod eius quod in angulo commu-
ni assistitur cum maxima item solis declinatione arcatim in tabulam mi-
ttentes in latere rubeo descendenti arcum ut assolet inveniemus qui
demptus ex quadra circuli relinquet argumentum laterale. Huic itaque ar-
gumento laterali conferas declinationem stelle. Nam si punctus celi medi-
ationis in semicirculo ecliptice boreali extiterit declinatio quoque stelle
borealis fuerit quantacumque aut meridiana minor quidem dicto ar-
gumento laterali punctus celi mediationis et locus stelle verus in eodem
quadrante ecliptice constituentur. Si autem declinatio meridiana me-
moratum argumentum laterale superaverit in diversis quartis reperient
puncta predicta. Similiter si punctus celi mediationis austrinam ecliptice
medietatem possideat et declinatio stelle meridiana fuerit quanta-
cumque aut borealis minor quidem argumento laterali eadem ecliptice qua-
dra et verum stelle locum et punctum celi mediationis recipiet. Si autem
latitudo borealis predictum laterale argumentum excesserit in diversis ecli-
ptice quartis prefata dissident loca. Et si hic quidem loca et decli-
natio meridiana aut illic borealis argumentum laterale equaverit
locus stelle verus in altero punctorum equinoctialium habebitur in
eo scilicet quod est in semicirculo ecliptice stellam recipiente et ad [illegible]

Si punctus celi mediationis fuit in semicirculo ecliptice ascendente

si fuerit in semicirculo descendente

piscis desinente. Procedure gratia exemplarem accipe supputacionem.
Stella quedam mediat celum cum fine sexti gradus leonis cuius declinacio
borealis sit 27 43. querit quispiam exhiberi latitudinem eius stelle
cum vero locus in ecliptica punctus celi mediacionis borealem habet de-
clinacionem 18 49 quam aufero ex declinacione stelle quando quidem
eadem sunt denominacione et relinquuntur gradus 9 quos cum angulo
ecliptice et meridiani apud punctum celi mediacionis proueniente qui
est 74 41 lateraliter in tabulam generalem duxi michi offertur
latitudo stelle 8 43 borealis quidem quia declinacio stelle borealis
existens superat declinacionem puncti celi mediacionis. Nunc pro
loco vero stelle arcus circa que debetur arcui ecliptice inter caput
cancri et punctum celi mediacionis conclusus est 58 22 qua cum com-
plemento declinacionis stelle 62 11 lateraliter in tabulam duxi
iuxta preceptum datum 33 9. Hunc deinde numerum cum comple-
mento latitudinis stelle 81 17 arealiter in tabulam mittenti michi
offertur 33 44 distancia scilicet veri loci ab alterutro punctorum
tropicorum. Si itaque verus stelle locus et punctus celi mediacionis
in eadem ecliptice quarta essent tam nemo dubitaret quin stelle
locus in 3 44 leonis existeret. Atsi in diversis quartis deprehende-
retur cum punctus celi mediacionis sit in quarta estivali necessario lo-
cus stelle verus in quadra autumpnali videlicet in 26 14 scorpii reperire-
tur. Verum cum punctus celi mediacionis sit in semicirculo ecliptice
boreali et declinacio stelle borealis existat necesse est sedem antedicta
verum stelle locum esse in eadem quarta cum puncto celi mediacio-
nis. Quod si stella habuisset declinacionem meridianam anceps fuisset
de loco eius vero determinacio. qua quidem ambiguitate me expedi-
rem hoc pacto ascensionem rectam que ante habitam prius sum 35 22 vna
cum complemento maxime solaris 66 30 mitterem in tabulam la-
teraliter duceremque 32 43 huius numeri complementum 44 17 cum
maxima declinacione solari 23 30 arealiter deinde transferendo in
tabulam excaderem 29 1 complementum huius 60 49 vocarem argumen-
tum locale cum demum conferrem stelle declinacione meridiana. Nam
si qua declinacio minor esset tali argumento locali procul dubio in
eadem quarta reperientur punctus celi mediacionis et verus stelle locus.
Si autem declinacio superaret tale argumentum locale in diversis quartis constituerentur
et si equalis esset declinacio tali argumento verus stelle locus
in principio libre haberetur. Problema LXI

## Cognita latitudine cuiuspiam stelle punctoque celi mediacionis explorato locum eius verum in ecliptica declinacionemque ab equinoctiali circulo perquirere

Hoc problema precipuum utile est ad loca
stellarum fixarum inquirenda. Nam si aliquam earum in meridiano
observaveris mox punctum celi mediacionis comitabis per nostram lo-
ci solaris atque temporis inspeccioni tue respondentis latitudinem atque eius
absque ullo supputacionis dispendio comparabis si numeris ptholomei
studiosissimi fidem habeas. Intra igitur arealiter cum latitudine stel-
le et angulo quem meridianus cum ecliptica apud punctum celi medi-
acionis complectitur numerumque in latere rubro descendenti collectum
serua cum sua denominacione aquilonia vel austrina. habebit autem
numerus ille sic eam denominacionem qua fuit proposita latitudo
stelle. Postea declinacionem puncti celi mediacionis addisce cum sua de-
nominacione qua quidem declinacionem iunge numero prius seruato
si eadem vtrobique denominacio fuerit et consurget declinacio stelle
quesita eam sumptura denominacionem qua insignite erant partes
sue. Iterum si coniungenda declinacio puncti celi mediacionis et nu-
merus ante habitus seruatus diversis fuerint denominacionibus minorem
ex maiori deme ut relinquatur declinacio stelle seruata denomina-
cione maioris numeri vnde videlicet fiebat subtractio. Nam deinde
loco stelle investigando via parata est. Nam cum declinacionem eius
exposita doctrina manifestet punctus autem celi mediacionis ab ini-
cio suppositus sit locum vero stelle atque eius longitudinem zodiaci
na generaliter si precedentis problematis formulam inmemorabiliter
tenueris. Que res exemplo breuiusculo poterit illustrari si stelle

Cuiusdam latitudinem borealem sex graduum supposuerimus que quidem celum medi:
et cum fine vigesimi quinti gradus thauri. Nam angulus meridiani et ecliptice a:
pud tale punctum proveniens .76. gradus complectitur quem cum latitudine
memorata .6. 0. arcabum in tabulam ferenti mihi offertur numerus ille 6.
11. borealis quidem quia latitudo stelle ad aquilonem vergat declinatio autem
puncti celi mediationis est .19. 2. et eadem borealis. Cui ideirco superius
addere debeo .6. 11. ut colligitur nobis .24. 14. prodat declinationem stelle a
quilonarem quod quia vergit versus tonitorum aquilonis cognomento fuerit
porro ex iam inventa declinatione atque puncto celi mediationis cum dudum
supposita stelle vera demum quere non iuvat ne fastidio (?) magi
rare afferrem. Si quis calculus precedentis problematis abunde edoceri ex
prompsit

Problema lviii

# Punctum ecliptice quo cum stella quelibet oritur itemque punctum cum quo occidit in quauis regione artificiose rimari

Invenias per superiora problemata punctum ecliptice cum quo stella tua celum mediat ascensionem
que rectam arcus ecliptice ad tale punctum desinentis quam etiam non mi
nus ascensionem rectam stelle licet appellari. Quam item ex duodecimo pro
blemate arcum semidiurnum stelle nunc et semidiurni equinoctialis qui est .90.
graduum differentia que et ascensionalis differentia nuncupatur ascensio
ni recte memorate adiungas si stella declinationem meridianam habue
rit aut ex eadem minuas si septentrionalem obtinuerit declinationem quod
quia sic operando evenit erit ascensio obliqua arcus ecliptice terminati ad pu
nctum quod cum ipsa stella oritur. Hinc ergo ascensioni oblique quantus e
cliptice arcus debeatur quemadmodum superius traditum est animadverte
quia eum ecliptice arcus ad punctum quesitum te perducet. Quod si stella in
equinoctiali fuerit ascensio recta arcus ecliptice qui ad punctum celi mediatio
nis desinit erit et ascensio obliqua arcus ecliptice cuius finis cum ipsa stel
la oritur. Porro si arcum stelle diurnum tali ascensioni oblique iam memo
rate adieceris conflabitur ascensio obliqua arcus terminati ad punctum e
cliptice quod in orizonte orientali constituitur dum stella ipsa occidit qua per
ascensionem obliquam preditam cognita cognoscetur et punctus ei per diametrum
oppositus cum quo videlicet stella tua occidit. Talem etiam ascensionem ob
liquam habebis si ascensioni recte que arcui ecliptice ad punctum celi media
tionis desinente respondet idest recte ascensioni stelle quadrantem circuli cu
arcu stelle semidiurno adiungas. Et si differentiam ascensionalem stelle pro
posite habentis declinationem septentrionalem ascensioni sue recte adiu
nxeris aut huiusmodi ascensionalem differentiam stelle declinationem me
ridianam habentis ex ascensione recta demseris conflabitur aut re
linquetur descensio obliqua puncti ecliptice cum quo stella ipsa occidit que
haud absurde descensio obliqua ipsius stelle nuncupabitur cum semicirculus op
positus conficiet ascensionem obliquam ascendentis per diametrum op
positi puncto ecliptice cum quo stella tua occidit quo ascendente cognito
occidentalis quoque punctus ecliptice cum quo videlicet stella occidit
haud quaquam ignorabitur. Hec omnia per numeros exemplares fiunt
lucidiora. Repetatur stella cui paulo superius locum dedimus in quinto
decimo thauri gradu cum latitudine aquilonia septem graduum. Un
de et declinationem quidem sortiebatur .23. 3. septentrionalem ascensi
onem vero rectam .50. 18. Illo iam celi circulo quus ecliptice pun
ctus cum ea mediatur in regione boreali que ab equinoctiali plaga re
movetur .48. gradibus per duodecimum igitur problema invenio dif
ferentiam ascensionalem memorate stelle .28. 12. extracta prius ex tua
amplitudine .39. 49. quemadmodum ibidem precipitur quia differentia
ascensionalis adiecta quadranti quoniam declinatio stelle borealis est
conflabit arcum eius diurnum .118. 12. Idem cum semper numerus diffe
rentiam ascensionalem stelle metitur et differentiam arcus semidiur
ni sui et semidiurni equinoctialis. Hanc rursus differentiam aufero
ex ascensione recta stelle .50. 18. et relinquitur numerus ille .22.
6. idest ascensio obliqua stelle que eadem est ascensio obliqua respon
dens puncto ecliptice qui una cum ipsa stella exoritur quia aut ecliptice
punctus terminat .22. 45. arcus quoniam tanto arcui debetur
ascensio obliqua memorata in latitudine .48. graduum. Hinc ad
gradum stelle nostre occidentem calculus dirigatur. Arcus semi
diurnus stelle erat .118. 12. qui duplicatus conficit arcum diurnum
.236. 24. cum addo oblique ascensioni stelle .22. 6. ut concrescat

Summa .288.30. videlicet ascensio obliqua ascendentis dum stella oritur que
quidem ascendens ipsum depromit .20. 8. scorpij cui per diametrum op-
ponuntur .20. 8. tauri. Gradus itaque arcus extrema visibilia in ori-
zonte oriendus veniatur stella proposita solet constitui. Eam preter-
ea ascensionem obliquam ascendentis dum stella oritur constitui
ipsam si recte ascensioni stelle .60.16. adiunxisse arcum eius semidi-
urnum .118.12. cum quadrante circuli .90. graduum. Et si stelle borealis pro-
posite obliquam descensionem nosse libeat recte ascensioni eius .60.18.
differencia ascensionalis iam dudum inventa .28.12. adiciencda erit
sic et conflabitur arcus .88.30. cui si amplius semicirculum adieceris qui
solet descensionem occidentis atque ascensionem orientis disterminare
natam iterum videbis ascensionem obliquam ascendentis dum stella oc-
cidit .268.30. Cuius assercio haud quaquam ignotum esse arbitror. lxiiii

# Ex altitudinem stelle cognitamque et distanciam orizontalem a meridiano atque medium celi declinacionem ipsius stelle et punctum ecliptice cum quo celum mediat indeque latitudinem et verum locum eius in ecliptica subtiliter indagare.

Contra lateraliter cum distancia orizontali a me-
ridiano et complemento altitudinis stelle quadque dabit angulus communis
inventum primum appellato cum eius inventi primi complemento et
altitudine stelle arcatim tabulam nostram ingredere et eo quod in late-
re descendenti subtus arripuerit ex .90. .90. gradibus deciso residuum
vocabis inventum secundum quod quidem complemento altitudinis poli adi-
cias si distancia orizontalis a meridiano minor quadrante fuerit si
vero maior eo reperitur inventum secundum ex complemento altitudinis
polaris aut vicecersa minus scilicet a maiori auferas et quidquid sive
addicio sive subtractio reddet inventum tercium nominabitur. Intrando
itaque lateraliter cum complemento duorum inventorum primi et tercij re-
peries in angulo communi declinacionem stelle quequidem septentrionalis
quidem si inventum tercium minus quadra circuli fuerit meridia-
nam aut si maius eo extiterit. Et si equale quadranti occurrerit stella
ipsa declinacione carebit. Verum si distancia orizontalis a meridi-
ano .90. ad unguem gradus complectitur intranti tabulam lateraliter
cum altitudine stelle et latitudine regionis offeretur in angulo communi
declinacio stelle quequidem borealis quidem fit in regionibus aquilonijs me-
ridiana vero in habitacionibus austrinis. Sub equinoctiali aut vero
fo nulla in hoc casu eveniet declinacio. Et si orizontali distancia a
meridiano quadrantem circuli superante inventum secundum complemento alti-
tudinis polaris equale occurrat subtrahe inventum primum ex .90. gradi-
bus sic namque relinquetur declinacio stelle septentrionalis. Deinde aut
et punctus celi mediacionis innotescat intra tabulam arcatim cum ipso
invento primo et complemento declinacionis stelle quodque in latere cu-
bo descendenti reperies ascensioni recte medij celi adiungas si stella
circa meridianum fuerit aut ex eadem minue si meridianum tran-
ierit et quod sic agendo eveniet erit ascensio recta stelle ac etiam ar-
cus ecliptice desinentis ad punctum cum quo stella ipsa celum me-
diat. Extracto igitur eo arcu quemadmodum supra docuimus per-
duceris ad punctum cum quo stella talis celum mediat. Hec quidem
certa sunt universaliter quando distancia orizontalis a meridiano
minor est quadrante circuli vel quamvis maior quadrante circuli de-
duntaxat inventum secundum minus est complemento altitudinis poli
Nam quando tale inventum secundum maius est complemento altitudi-
nis polaris illud quod per inventum primum et complementum decli-
nacionis arcuali intraitu reperisti ex semicirculo minuas quodque re-
linquetur ascensioni recte medij celi ut prius adiungas vel excerpa mi-
nuas veluti situs stelle respectu meridiani hortabitur. Et si inventum
secundum et complementum altitudinis poli sese equaverint ascensioni
recte medij celi quadrantem circuli adicias si stella nondum ad meri-
dinem regium pervenerit aut ab ea demas si eundem trans-
ierit. Ceterum stella proposita meridianum possidente absque

illo sermo dispendio voluntati tue satisfaciens. Nam medium celi notum supponitur quod eius inventio ad quantumque horam pervulgata sit. Altitudo aut meridiana stelle ad elevationem equinoctialis circuli collata declinationem si qua fuerit manifestabit. Nam si hiis comparadi elevationes supra orizontem fuerint equales, nulla stella sibi declinationem vendicabit. Si aut elevatio stelle meridiana elevationem equinoctialis circuli supergrediatur, differentia earum pro declinatione stelle boreali accipietur. Et si vicevesa elevatio equinoctialis altitudinem stelle meridianam vicerit, differentia eorum austrinam stelle boreali declinationem explicabit. Per declinationem aut stelle et gradum quoque celimediationis quomodo et latitudo stelle et verus locus eius in ecliptica deprehendantur quinquagesimo quinto problemate satis lucubravimus. Correlarium magnum: cuiuslibet stelle supra orizontem constitute locum verum in ecliptica et latitudinem eius si quam habuerit investigare poterimus, non expectando si libet positionem eius in meridiano, neque astralabio armillari neque torqueto aut alio quovis instrumento difficili opus est. Verum sola meridiana linea sufficit tum instrumento qualicumque ad elevationes stellarum accomodabili. Linee namque meridiane officium erit ad distantiam orizontalem stelle a meridiano depromendam si parvo quodam adminiculo sufulta fuerit, idest circulo orizontali in gradus sexaginta et trecentos diviso, quemadmodum in libro instrumentorum astronomicorum habundius traditur. Quod et medium celi omni hora nemo nisi rudissimus nesciat invenire. Memento aut hec nostra propria regionibus duntaxat septentrionalibus accomodatum iri, ubi stellarum motus considerari plerumque solitum sunt. In habitationibus enim australibus quibusdam aliis cautiunculis opus est quas in presentiarum missas facimus, quod in usum nostrum nunquam venture sunt. Predictorum exempla subiungere libet. In regione latitudinem habente 48 gradium celi medium habeat 17 gradus geminorum, quo stella quedam altitudinem habeat ante meridianum 63. 0. distantiam quoque orizontalem a meridiano 34. 0. volo inquirere locum eius verum tam in longitudine quam etiam latitudine, vel aut efficiam si prius declinationem eius exploravero prius cum quo celi mediationis. Nam per quinquagesimum quintum problema vero deinceps loca eius agnoscendo via paratur. Igitur distantiam eius orizontalem a meridiano 34. 0. cum complemento altitudinis stelle 27. 0. lateraliter in tabulam mittenti michi mox offertur inventum primum 14. 6. cuius complementum 75. 54. cum latitudine stelle 63. 0. creatim demum in tabulam ducendo deritur numerus ille 67. 21. qui demptus ex quadrante circuli relinquit inventum secundum 22. 39. huic addo complementum altitudinis polaris 42. 0. ut concrescat inventum tercium 64. 39. distantia cum orizontalis a meridiano minor est quadrante. Deinde complementum huius inventi tercii 25. 21. cum complemento inventi primi 75. 54. lateraliter in tabulam transfero et in angulo communi sedium precepta invenio declinationem stelle 28. 29. borealem, quoniam inventum tercium minus est quadrante circuli. Porro ascensionem rectam stelle hac parte metiemur. Complementum iam invente declinationis 61. 31. cum invento primo 14. 6. creatim tabule inferendo elicit differentiam ascensionum rectarum stelle et medii celi 16. 57. quam addo ascensioni recte medii celi 74. 42. sic enim colligitur ascensio recta stelle 92. 29. cui debentur 2. 46. cancri. Is finis igitur huius arcus ecliptice mediat celum cum stella proposita. Ex quo demum resumpta declinatione iam deducta cognita si tu memineris que in quinquagesimo quinto problemate tradita sunt, verum locum stelle sedium longitudinem in ecliptica latitudinemque eius addisces. Sed ad eam rem non est opus puncto celimediationis cum satis sit novisse ascensionem eius rectam que et ascensio recta stelle dicitur. Reliquos vero casus cum hanc eandem fere supputationis formulam teneant missos facio, ne ingenium tuum supervacanea dictione remoretur. .lix.

Vera loca duarum stellarum fixarum cognita fuerint cum latitudinibus suis intercapedinem earum agnoscere. Et si ante hac simile problema ediderimus de duobus quibuslibet locis in superficie terrena

signatis tamen in circulo uerticali linee et diversa sint libuit propriam pro
blematis absolucionem constabere quo res ipsa cognitu facilior redderetur
Stellarum igitur latitudinem sola dissedentium breuiter habebis di:
stanciam si latitudinem unius ex latitudine alterius dempseris dum e:
andem habuerint denominacionem Nam si diversa fuerint denomi
nacione eas in unum congregare oportet ut concrescat intercapedo que
sita Si autem sola longitudine dissidant nullam habentes latitudine
distanciam earum arcus ecliptice duobus locis uerus interclusus ma
nifestabit Atsi latitudines habeant equales subtrahe longitudinem
unius earum a longitudine alterius minorem videlicet a maiore ut
remaneat differencia longitudinalis Voco autem longitudinem stelle
distanciam ueri loci sui in ecliptica a capite arietis Deinde intra in
tabulam nostram lateraliter cum dimidio dicte differencie longitudi
nalis et complemento latitudinis utriusque stellarum Nam duplum e:
ius quod in angulo communi occurret intercapedinem stellarum quesitam
indicetur Atsi latitudines inequales habeant stelle proposite eiusdem
quidem denominacionis intra lateraliter cum tota differencia longitu
dinali et complemento latitudinis maioris quodque in angulo communi o:
ffertur inventum primum nominabis Cuius inventi complementum
cum latitudine maiori arcuatim arcuatim in tabulam mittas Numeri
enim rubri in latere sinistro occurrentis complementum ex complemento
latitudinis minoris demptum relinquet inventum secundum Complementa
itaque horum inventorum lateraliter in tabulam ducendo habebis in an
gulo communi intercapedinem stellarum quam querebas Latitudinibus
autem varias denominaciones habentibus intra ut prius lateraliter cum
complemento latitudinis borealis et differencia longitudinali ut angulus
communis prebeat tibi inventum primum Cuius deinceps inventi co
mplementum cum latitudine septentrionali tabule arcuatim inferas Nu
merus enim ruber lateris sinistri adiectus latitudini meridiane inven
tum secundum conficiet cum quo rursus inventoque primo ut supra procedendum
dum est Quod autem de stellis fixis hactenus explanatum est plane
tarum quoque locis ac quibuslibet duobus punctis sive in celo stella
to assignentur sive in primo mobili poterit accomodari que res plurimo
erit momento in orbibus luminosis stellarum infra quos fieri dinosc
aplicaciones mutacionibus et annorum quas nativitatum uidentes pertractant
atque radiacionibus stellarum quamobrem haud inepte subiungendum
videtur problema radiacionum Sed prius exemplum presentis pro
blematis accipiendum est proponantur due stelle quarum prima qui
dem locum habeat in fine quinti gradus thauri secunda uero in fi
ne tercii et uigesimi gradus eiusdem signi Utraque autem latitudi
ne boreali .10. gradus complectatur quero intercapedinem duarum
stellarum Inter quintum itaque thauri gradum vigesimumtercium reperi
tur differencia longitudinalis .18. graduum cuius dimidium .9.0. in com
plemento latitudinis .76.0. lateraliter in tabulam duco et in angulo
communi offerendo .8. .42. hic numerus duplicatus conficit .17.28.
intercapedinem stellarum quesitam Ceterum stelle proposite statuan
tur in locis pristinis secundum longitudinem zodiaci Prima autem latitu
dinem habeat borealem .24.0 secunda uero .13.0 Querit intercapedi
nem earum dimensurus cum differencia longitudinali .18.0. et com
plemento latitudinis maioris .64.0. lateraliter ingrediendo tabulam
educo .16.16. inventum primum cuius deinde complementum .73.44.
cum ipsa maiori latitudine .24.0. arcuatim in tabulam traducenti mi
chi ipsa offertur numerus ille .26.7. huius complementum 63.43. aufero
ex complemento latitudinis minoris .77.0. ut remaneat inventum
secundum .13.7. Cuius postremo complementum .76.43. cum complemento inven
ti primi .73.44. per latera tabule introducendo exprimitur inter
capedo stellarum quesita .69.12. Reliquus autem casus qui alteram
quidem stellarum ad septentrionem statuit alteram uero ad austrum in
cidit pene mutat nisi quod numerus secundo introitu solerter arcuali expli
cituri latitudini austrine coniungit ut inde prodeat inventum secundum
Cetera universa prout cumdudum absoluenda sunt Problema .10.

## Radiorum proiectionem racionabiliter definire

Huius negocii fundamenta atque speculacionem in commentariis quidem astronomicis habunde invenies In libro autem directionum

tabellam quandam condidimus per quam exploratur quo non pertingat radius
stelle latitudinem octo gradibus ab itinere solari non excedentis hic vero ra-
dius defluant in ecliptica si modo eclipticam attingere possunt Nam
si stella quecumque habuerit latitudinem maiorem 60 gradibus ra-
dius eius exagonus verbi gratia nequaquam primet eclipticam
Si autem 60 gradus ad unguem compleuntur radius exagonus in loco
longitudinis defluit Cum latitudo minor fuerit sexagenario numero
[illegible] radiacionis exagone secabit eclipticam in duobus punctis equali-
ter a vero loco stelle scilicet longitudinem utrimque remotis quorum
nempe punctorum distanciam ab ipso vero loco longitudinis stelle in pre-
senciarum perquirimus querere Circulus autem radiacionis exagone vocatur
cum a cuius circumferencia stella aut locus eius verus in super-
ficie primi mobilis undique distat 60 gradibus In radiacione autem
quadrangula huiusmodi distancia est 90 graduum et in radiacione tri-
gona 120 graduum Cum igitur volueris scire quo nam stella quamvis
latitudinem habens radium suum exagonum aut trigonum proiciat in-
tra tabulam creatam cum triginta gradibus et complemento latitudinis
stelle Numerus cui ruber qui in latere descendenti occurret ex quadrante
sumptus pro radiacione quidem exagona aut quadranti adiectus pro ra-
dio trigonali suscitabit intervallum radiacionis quod querebas computa-
dum quippe a loco vero longitudinis stelle scilicet successionem quidem
signorum pro radiacione sinistra sed contra signorum seriem pro ra-
diacione dextra Ubi cum incideris talis defluit illuc porrigitur radius
quem scrutare cupisti Intervallum autem radiacionis quadrate si nonaginta
complentur gradus sine latitudinem stella habeat sive non Stella
postremo quecumque solari orbita recipitur intervallum radiacionis cuius
exagone semper habet 60 gradus radiacionis aut trigone 20 et 100
nec [illegible] Exemplaris aut memorario preductum tale esto Sit
quedam stella in septimo gradu geminorum habens latitudinem octo
gradus volo reddi certior quantum distet finis radii sui exagoni a
vero loco ipsius stelle in ecliptica Itaque complementum latitudinis scilicet
82 0 una cum 30 gradibus creatam mitto in tabulam et duco se-
cundum preceptum 30 20 hunc arcum demo ex 90 pro radiacione ex-
agona et eundem adiungo 90 gradibus pro radiacione trigona Lon-
gitudo igitur exagone quidem radiacionis invenitur 59 40 radiacio-
nis autem trigone 120 20 quarum utrimque a vero loco stelle idest a fine
septimi gradus geminorum computanda est Problema lxi

## Intervallum apparicionis et aut occultacionis stelle perscrutari

Intervallum apparicionis vocatur arcus ecliptice soli et stelle primum apparenti interia-
cens Intervallum autem occultacionis est arcus ecliptice qui claudi-
tur inter solem et stellam occultari incipientem Cumque re[illegible] habent [illegible]
cognicionem verum tabulam apparicionis atque occultacionis quinque er-
raticarum qua ptholomeus in terciodecimo libro magne construccionis
ad [illegible] clima medium [illegible] [illegible] quasi generalem ceteris climatibus
accomodant rem profecto absentaneam facientes cum appa-
ricionum atque occultacionum [illegible] ad alias regionem latitudines alie ne-
cessario habeantur Nam et si planetarum qui retrogressionem paciun-
tur sunt quisque visionis arcum habeat certum et in omni regione
eundem mercurius quidem 10 gradus venus autem 5 stella martis
11 [illegible] propter varios tamen angulos atque inclinaciones ecliptice et orizontis
apud eadem puncta ipsius ecliptice provenientes [illegible] accelera-
tur apparicio et occultacio [illegible] aut procrastinatur Arcum autem
visionis dicimus porcionem circuli magni per verticem regionis
et centrum solare incedentis que inter orizontem et solem sub o-
rizontem comprehenditur dum stella primum apparet aut occulta-
tur [illegible] usque arcus in proposito habendus est Deinde si ad appari-
cionem matutinam et occultacionem vespertinam appellas animum
per vicesimum primum problema disce angulum ecliptice et orizon-
tis orientalis qui apud stelle locum producent cum quo et arcu vi-
sionis intra tabulam creatam habebis [illegible] in latere rubro de-
scendenti arcum ecliptice quem interradere oportet soli et vero

[illegible]

Marginal notes:
- ptholomeus (left, beside line "secundum preceptum")
- [illegible] forme Iupiter [illegible] et Saturnus [illegible] (left, beside "11 propter varios")
- Arcus visionis (right, beside "Arcum autem visionis")

Loco stelle apparere aut occultari incipientis. Pro apparitione aut vel occultatione
vespertina stellas ex memorato problemate angulum qui fit ex ecliptica et
orizonte occidentali apud locum stelle. Cuius anguli arcum si non supera-
verit quadrantem circuli aut residuum de semicirculo si quadrantem vicerit
unacum arcu visionis arealem tabule inmittas quod cum in latere
rubeo descendenti occurret intervallum apparitionis aut occultationis
utram solveret quesieris commonstrabit. Equidem non arbitror te esse
ingenio crasso et subtili adeo ut turbulentam esse censeas ivimus
nostra quod promiscue et quasi uno precepto contrarias ac longe di-
versas stellarum passiones absolverat. Si cum vesperis apparitionem qui-
dem plerumque sit fieri cum intercapedo solis et stelle minus augeatur
sit aut occultationem cum huiusmodi intercapedo descendentium minui
tur. Contra has vero lucubratiunculas volvabis quippe qui calcu-
los maturius non satis teneas quos ne discipuli quidem et imperiti a-
stronomice ministerii [illegible] solent ignorare. Hactenus de stellis in
ecliptica constitutis. Ceterum si qua stella proposita orbitam solis
solarem transiliat longe aliter atque perceptum est res efficitur. Nam
si intervallum apparitionis aut occultationis matutine velis eruere in-
vestigandum est primo arcualium in latitudine regionis et complemento declina-
tionis stelle quod ab in latere rubeo descendenti occurret involutum inven-
tum primum. Deinde distantia veri loci stelle ab altero punctorum equinoctialium
cum videlicet que non superat quadrantem unacum maxima solis obli-
quatione lateraliter in tabulam transfero et quod per angulum concurrentem
ut assolet exhibetur rursus arealem in tabulam duc ducto cum com-
plemento declinationis stelle invenietur quod latere rubeo hac lege electa
adiunge invento primo si vero locus stelle fuerit in semicirculo ecliptice
ascendenti in eo scilicet qui capricornum et sequentia quinque signa con-
plectitur. Aut cum numerum ex invento primo deme si verus locus
fuerit stelle in dimidia ecliptica descendenti quodque altero eorum mo-
dorum velut res postulat expletum fuerit inventum secundum discretionis gra-
tia agnominabitur. Hac deinde inventum secundum lateraliter tabule in-
fer cum complemento latitudinis stelle et numero que prebebit angu-
lorum ex 90 gradibus abiecto reliquum unacum inventum tertium
quodque vadit magnitudinem anguli ab orizonte orientali et ecliptica
comprehensi quem etiam arealem in tabulam traducito cum latitudine stel-
le et quod in latere descendenti ut assolet occurrit lateraliter de-
mum tabule immissum unacum invento secundo dabit arcum ecliptice inter
locum stelle atque orientem ipsi interclusum. Tale itaque inventum tertium cum arcu
visionis arealem in tabulam mitto habebis cum in latere rubeo arcum
ecliptice a sole non diu orto atque horoscopo ipsa comprehensum. Horum at-
que postremo inventorum minorem ex maiori aufer si latitudo stelle a-
quilonia fuerit aut alterum alteri superadde si austrinam stella susceperit
latitudinem. Sic namque ut minuendo si res hortatur ut adiungendo tantus
excipietur arcus quantum intercidere oportet globo solari ac vero loco
stelle primum apparentis aut occultari incipientis. Non aliter investigabis
arcum apparitionis aut occultationis vespertine. Hoc uno dumtaxat
mutato quod ubi supinus fiebat additio numeri per tertium introitum eliciti ad
inventum primum ut conflaretur inventum secundum hic fiet ablatio et
converso ubi hic subtractio fiebat ab invento primo ut eiusdem quereretur
inventum secundum ibi nunc per additionem res absolvitur. Et preterea quando
stella nulla prorsus ab equinoctiali circulo declinationem sortitur tamen
et si ab orbita solari in alterutram partem secedat quod dum usu veniat
latitudo regionis pro invento primo accipietur porro inventum tertium
elicere poteris absque adminiculo ceterorum inventorum primi scilicet et se-
cundi. Nam si matutinam passionem molitum per quinquagesimi
septimum problema explorabis punctum ecliptice cum quo stella pro-
posita oritur in regione tua. Unde et demum per vigesimum primum
angulus ecliptice et orizontis orientalis apud tale punctum provenien-
tis agnoscetur. Si aut serotinum occiduus contemplari libeat pun-
ctum ecliptice cum quo stella occidit angulum quem ecliptice et orizontis
occidentalis qui apud tale punctum constituitur per antedicta problema-
ta elicias. Is enim angulus inventi tertii cognomentum sibi tam dudum
usurpavit. Hinc demum sit finitus problematis huius opere-
pretium est intelligere. Quando intercapedo locorum solis et stelle
proposite ad horam considerationis tue intervallum predictum equaverit:

Rursus si vis inspicere apparitionem aut occultationem stelle vespertinam vide ubi quasi
eius arcus distantia locorum minor fuerit huiusmodi intervallo stellis sibi
propinquantibus preterisse occultationem aut a se recedentibus futuram esse
apparitionem pronosticabis. Quotiens vero talis distantia locorum maior
extiterit intervallo memorato stellis ad se appropinquantibus
futuram esse occultationem aut a se discedentibus preterisse apparitionem con
iectabis. Accessus autem talis divisio per superationem motuum diurnorum potest per stel-
la directa aut per congeriem eorum motuum postella retrograda elicit
numerus dierum qui inter horam considerationis tue et tempus passionis que
sunt continentur. Iterum qui hoc solo contentus esse nolit et scire an stel
la quepiam prope solem constituta mane possit videri an non longe
brevius atque facilius voluntati sue respondebit si per vicesimum primum
problema didicerit angulum ecliptice et orizontis orientalis qui sit a
pud locum stelle carentis latitudine aut apud punctum ecliptice cum quo
stella ipsa latitudinem habens oritur. Deinde aut lateraliter tabulam ingre-
ssus fuerit cum dicto angulo et arcu ecliptice quo locus solis et locus
stelle aut punctus cum quo ipsa oritur intercluditur. Nam qui in area tabule
ut assolet colligetur numerus ad arcum visionis collatus rem omnem prodet.
Quippe si fuerit minor ipso arcu visionis frustra oculos ad stellam mane
videndam quispiam apponet. Si vero equalis ei extiterit iam tum terminum
[illegible] apparitionis aut occultationis esse coniectabit. Sed aut numero arcum
visionis superante stellam mane conspicere poterit modo orizontem habe
at expeditum. Non aliter res [illegible] erit circa passionem vespe
rtinam assumpto dumtaxat angulo ecliptice et orizontis occidentalis.
Nam ad exempla [illegible] ponatur stella mercurii in sexto gra
du virginis absque latitudine volo querere intervallum apparitionis eius
matutine aut occultationis in regione cuius polus vertex [illegible] 48
gradibus. Invenio per vicesimum primum huius problema angulum eclipti
ce et orizontis orientalis iuxta finem sexti gradus virginis provenientem
. 61. 48. quem cum arcu visionis mercurii . 10. 0. arcatim in tabulam duco
et in latere [illegible] descendenti colligo intervallum passionis matutine . 11. 14.
Igitur mercurio in sexto gradu virginis existente sole . 17. gradus et . 14.
minoris eiusdem signi emenso mane oritur si per retrogressionem a
sole retro signorum seriem recesserit aut mane occidet si progrediens
ad solem [illegible]. Quam [illegible] supputationis modulo intervallum ap
paritionis vespertine scrutabor mercurio eundem locum quem prius oc
cupante. Nam per vicesimum primum item problema angulum eclipti
ce et orizontis occidentalis reperio . 19. 28. quem cum arcu visionis . 10. 0. arc
atim in tabulam ducenti [illegible] efficitur in latere [illegible] intervallum pa
ssionis vespertine . 31. 26. Constat autem abesse mercurium a sole nequit et ideo
a nemine umquam in eo situ vespere videbitur. Nam etsi omnes causas
remotionis mercurii a sole congesseris puta equationem centri maximam
. 3. 2. equationem argumenti summam . 23. 43. Et equationem solis ma
ximam . 2. 10. que simul convenire non possunt . 29. 4. ferme conflabis nu
merum scilicet minorem intervallo iam invento exquisito. Qui ergo mercu
rium in primis partibus virginis latitudine carentem vespere videre ten
tat ludit operam. Nam deinde ponatur venus in principio arietis cum
deinde latitudinem aquilonarem . 6. 20. [illegible] paulo maiorem si calculo
credimus in tali situ sortiatur id sit [illegible] interim habet rationem nostram
quoniam potius procrastinabit occultationem eius vespertinam circa qua
[illegible] declinatio itaque stelle borealis est . 4. 35. cuius com
plementum . 85. 12. cum latitudine regionis . 48. 0. arcatim in tabulam
mitto ut [illegible] invenitur [illegible] . 48. 20. Deinde cum distantia veri loci
sui ab utroque tropico . 90. gradum maxima solis declinatione laterali
ter intrando tabulam [illegible] maxime solaris declinationis numerum
reperio . 23. 30. quem rursus cum complemento declinationis stelle . 85. 12.
arcatim in tabulam ferenti [illegible] efficitur [illegible] numerus ille 23 [illegible] quo
deinceps lateraliter in tabulam misso cum complemento latitudinis stelle . 83.
. 40. ostenditur arcus ille . 28. 32. cuius complementum . 61. 28. [illegible]
lum tertium. Hoc ergo invento tertio cum latitudine stelle . 6. 20. arcatim
in tabulam ducendo [illegible] . 6. 48. quos deinde lateraliter
cum invento [illegible] . 28. 22. in tabulam mittenti [illegible] efficitur intercapedo
loci stelle et occidentis . 7. 42. Rursus cum invento tertio et arcu visio
nis . 4. gradum arcatim ingrediendo tabulam recipio . 4. 30. intercapedo

Dimem solis et occidentis. Ex qua demo intercapedinem stelle et eiusdem
occidentis .2.36. Unde colligi potest quod stella in principio arietis latitudine ubi
neus sole in .27.28. piscium reperto vesperi occultari incipit. Quam facile
intelligis ut arbitror quod ab initio huius tabule commemoratum est. Nam
si latitudo borealis .5.20. protrudit stellam extra fulgorem solis quo ad
cerni queat in occidente maior latitudo amplius utique promovebit. Hinc
possum matutine demum aparitionem veneris item caput arietis permonte
usque a vestigio solari ad septentrionariam regionem ut prius serendente. In-
ventum primum est ut ante hac circa occultationem vespertinam .48.20.
in inventum secundum reperitur .71.48. addendo videlicet illud admonentem
primum quod superius extra ablatum est quemadmodum stella verum in prin-
cipio arietis statuitur. Hoc itaque inventum secundum cum complemento latitu-
dinis stelle .83.40. lateraliter in tabulam mittendo et numerum anguli
communis .70.42. ex nonaginta gradibus auferendo relinquitur inve-
ntum tertium .19.6. quod deinde tertium inventum cum latitudine stelle .6.20. ra-
tum in tabulam transferunt numerum dictum .19.43. rursus cum inventis
secundo .71.48. lateraliter in tabulam mittentem mittenti indicat offertur inter-
capedo orientis et loci veri stelle .18.42. Tale item inventum tertium .19.6.
cum arcu visionis .4.0. directum in tabulam ferens dicto .14.27. intercapedi-
nem solis et horoscopi qua minus quarta ecliptice inter verum stelle locum
et horoscopum complexo .18.42. ut reliquatur intervallum apparitionis ma-
tutine .3.14. Hinc ergo colligit venere in arietis principio ac in ipsa pene
epicicli sui parte constituta mane videri posse sole gradus .26. et minutas
.29. piscium obtinente quod mirabile admodum videbitur nisi tantam stelle la-
titudinem initio convenientem animadverteris si quidem globus solaris lo-
cum stelle verum in ecliptica oriendo preeunt. Illud autem multo mysterius
videbitur bis eadem die naturali stellam veneream mortalibus posse illucescere
re. Hinc quidem vesperi post solis occasum. Nunc autem mane nondum orto so-
le. Nam si ponatur hic gratia hoc mane stella veneris prope imam epi-
cicli partem existens in principio arietis sed autem gradus viginti sex et
minutas .29. piscium ut amplius parum emersus sit stella ipsa videri potuit
quemadmodum iam hic expositum est. In eo situ autem motus stelle diur-
nus per retrogressionem .36. fere minutas unius gradus complectitur
unde cum spatio duodecim horarum equalium idest eo ferme tempore
quod ab hesterno casu ad ortum hodiernum effluxit .18. minutis retror-
sum sole prope equinoctialem circulum constituta atque interea dimidium pene
gradum occurrente qualiterque si hodie intervallum apparitionis matutine
idest intercapedo solis et loci stelle fuit .3.14. hesterno vesperi loca vera
stellarum .4. prope gradibus distabant. Superius autem diximus interval-
lum occultationis .2.36. quod quidem stelle postremam primitus lucem
ac qualitumque saltem oculis remittere videbatur igitur magis intercapedo
.4. graduum id efficiet si quidem stella orizontem occiduum possidente so-
lem amplius deprimi atque idcirco radios debiliores ad stelle regionem
transmittere oportet. Sunt demum eiusdem mysterii confirmacio non de-
erit si hoc mane quidem stellam ut antea posuerimus in principio arie-
tis ab ecliptica septentrionem versus remotam gradibus .6. ac tertia
parte unius solem autem infime vigesimi septimi gradus piscium.
Nam stella oritur cum .11.18. piscium ubi angulus ecliptice et orizontis
orientalis .19.6. ferme constituitur quantum videlicet superius erat inve-
ntum tertium dum de ortu differebatur. Intercapedo autem solis et puncti
cum quo stella oritur est .14.42. quam unacum angulo memorato .19.
.6. lateraliter in tabulam mittens reperio .4.4. depressionem solis sol
sub orizonte que cum superet arcum visionis .4.0. stellam mane iux-
ta orizontem videri posse perspicuum est. Hesterno autem vesperi locus
solis quidem fuit .26.30. fere piscium veneris autem .29.42. eorumque
stella occidebat cum .2.37. arietis ubi angulus ecliptice et orizontis
occidui fiebat .64.28. prope. Ut enim supra cum de casu agereretur in-
venti tertii nomen usurpavit. Intercapedo autem solis ac prefati puncti in
quo stella occidebat erat .6.7. quam si lateraliter in tabulam duxero
unacum angulo producto .64.28. colligam in area tabule ut assolet
.4.38. fere arcum videlicet circuli verticalis qui inter solem iam occa-
sum et orizontem occiduum clauditur quo quidem arcum visionis superante
liquet stellam veneris in eo situ cerni potuisse. Hic quod vulgo mira-
bile putatur solem vesperis sero quidem insequens mane autem po-
stero eundem preveniens oculis illucescere potest. Huius rei exemplaris

supputacio postremi quoque problematis interpretamento illustrauit Rationes
generali quoque quadam problematum contextu lusimus plerumque cum michi
ad proprios stellarum motus inspexerimus qui ab occidente in orientem perpendi
solent sed plurimum circa supremi celi mutacionem quoque eam consequuntur
uersati sumus Nunc autem vicinius ad stellarum motus proprios accedere libet
qui cum pene omnes a motu celi stellati perinde quasi principio quodam co-
muni dependeant neque ullomodo absque eius noticia comprehendi possint
uere priores partes illi orbi tradere debent Idipsum quoque expostulat
situs huiuscemodi spere quando quidem proximo celo veluti prisca philoso-
phia docet proximam obtinet sedem Probleuma lxiij

# Equacionem octaue spere secundum alfonsi fundamenta numerare

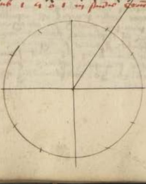
Medius motus accessus et recessus octaue spere sicut vi necessarius est Cum igitur
per tabulam suam more vulgato adiectas qui si minor quadrante circu-
li fuerit idoneus erit proposito nostro Si autem maior eo semicirculum quidem
non attingens eum ex semicirculo demas residuum seruando Et si semicir-
cumferenciam uincat minor adhuc tribus quartis aut .270. gradibus semicirculus
subtrahe ex eo diuiduum circulum quodque remanebit custodi Si uero tres
adiecerit Residuum igitur aliquo istorum modorum ueluti rex quesitum inuenit tabu-
le lateraliter inmittas in area .9. gradium In angulo namque communi equa-
cionem offendes quesitam Quomodo quidem et pacto dicta equacionis octaue
spere consonam ei qua probet alfonsinus abacus uerum huiusmodi equa-
cio non respondet supposicioni quia alfonsus ipse et eius sectatores inmi-
tuntur quemadmodum in comentariis astronomicis adnotauimus quod
tollerandum ne sit in parte an ponitus reprehendendum non est nunc locus
differere Ceterum an nunc suppositio ipsa similitudinem quampiam
habeat tam etsi vulgus astronomorum haud dubitet inibi diffusius lucubra-
tum est Nunc autem perinde quasi omnino stabilita sit hec consideracio
de motu celi stellati sermonem faciemus calculum expositum mathematicis
demonstracionibus congruentem Si igitur equacionem huiusmodi recte
computare libet motum accessus et recessus ut uocabulis per tabulas tradi-
tis utar ueluti supra monitus est perquiras qui si quadrante inferior fuerit ex
.90. gradibus auferatur Si maior eo semicirculum autem non attingens deme
ex eo quadrantem circuli residuum quod serua Si autem diuiduum circulum supra-
uenit circa .270. gradus manens ipsum ex .270. minuas Et si tres cir-
culi quadrantes uicerit ex eo .270. tollas ut residuum opere futuro ser-
veat numerus itaque aliquo dictorum modorum electus lateraliter
in tabulam ducatur cum .9. gradibus numeri quod in area collecti comple-
mentum cum .81. gradibus arcualiter deinceps in tabulam transferas quod
enim in latere ubro dependenti occurret ex quadra circuli demptum
equacionis quesite relinquet quantitatem addendam quidem quando mo-
tus accessus et recessus octaue spere minor semicirculo supponitur mi-
nuendam uero quando maior Dum autem nullo numero representatur
motus ille nulla quoque equacio reddi potest quod et accidere perhibet
motu accessus et recessus semicirculo equante Cui si quadrantem circuli
ad unguem complectitur aut tres quadrantes maxima sibi deposcit equa-
cionem .9. graduum Prior quidem addendam ille uero minuendam
Exemplum huius problematis pronunciate argumentum octaue spere quod
vocant medium motum accessus et recessus .74. graduum cui debitam equa-
cionem sibi quesitam reddi poscat Quoniam itaque argumentum illud est
minus quadrante circuli mitto ipsum lateraliter in tabulam cum .9. gradibus
quemadmodum primus hortatur modus et duco equacionem .8. .61. .27.
Et si sequi filum demonstracionis geometrice calculum ordinare iubeat
demam .74. gradus argumenti ex quadra circuli restabunt .16. .6. quos
una cum .9. gradibus lateraliter in tabulam ducenti michi offeretur nume-
rus ille .2. .19. cuius complementum .87. .41. cum .81. gradibus arcualiter in
tabulam transferendo elicitur arcus ille .81. .19. cuius complementum .8.
.41. equacionem manifestabit quesitam Ambos uerum prope euenisse pri-
us elicitam equacionem tam etsi opus diuersum sit Verum si paulo
curiosior fiat supputacio usque ad secundas minucias aliquantula pro-
fecto differencia sencietur Probleuma lxiiij

# Equationem octave spere secundum considerationem Thebit supputare.

Queras primo medium motum accessus et recessus octave spere per tabulam suam qui si minor quadrante fuerit serves, si vero maior eo minor quam semicircumferentia ipsum ex 180 deme; si maior fuerit semicirculo minor autem tribus quartis ex eo minue semicirculum; quas tres quartas si aliquando vicerit ipsum ex toto circulo aufer quodque sic agendo depromitur lateraliter tabule mittas. cum [illegible] gradibus et 19 minutis area qui in angulo communi occurrit cum 23 gradibus et 56 minutis in tabulam arearum traduc. Habebis enim in latere rubeo descendenti equationem quesitam addendam quando medius motus accessus et recessus minor est semicirculo minuendam vero quando maior. Hac quidem ratiuncula invenitur equatio octave spere qualis est in tabulis toletanis et trahitur ipsum ex suppositione Thebit quamvis aliquantulum a vero recedat qui supponit angulum contentum ab equatore et ecliptica octave spere esse graduum 23 et minutorum 56 qui quidem angulus varia pro tempore sortitur magnitudinem si assertoribus fides habenda est. Sed si omnimoda suppositione eius de motu octave spere innixi velis ut predictam equationem agnoscas exquisitissime hac via gradiendum est. Argumento octave spere adde gradus 23 minuta 33 et secunda 30 idest inclinationem ecliptice fixe ad equinoctialem circulum. Collectum quod continua [illegible] quadraginta [illegible] signa per primo numero introitu [illegible] si fuerit minus quadrante si vero fuerit maius quadrante circuli minus quidem semicirculo subtrahe ipsum a dimidio circulo et residuum tene pro primo numero introitus. At si semicirculum superaverit citra tres quartas manens semicirculum ex eo minuas residuum signando. Si denique tres quadrantes vicerit tale collectum ex toto circulo deice et residuum erit primo numero introitus. Secundus vero numerus introitus sic erit gradus [illegible] minuta 19 [illegible] est semidiameter circuli parvi circuli. Hos ergo numeros introitus in tabulam lateraliter mittas quodque pro [illegible] angulis communibus invenitur primum nominetur. Deinde eundem numerum [illegible] 19 cum complemento primi sui desit [illegible] anteibat cum eo lateraliter in tabulam misisti lateraliter denuo introducas et complementum numeri in latere rubeo ut assolet oblati vocabis [illegible] quod denique invenitur secundum cum gradibus 23 minutis 33 et secundis 30 lateraliter in tabulam transfer et numerum in area occurrentem appellabis inventum tertium. Cum inventi tertii complemento ac complemento inventi secundi tabulam arealem ingredere numerum quoque in latere rubeo descendentem collectum vocabis inventum quartum. Illud insuper quartum inventum cum gradibus 23 minutis 33 et secundis 30 tabule lateraliter immittas et quod in angulo communi offertur ex quadrante minuas si collectum ex quo superius numerum introitus primo elicuisti minus quadrante fuerit aut maius tribus quartis. Sed ipsum numerum anguli communis quadranti adiungas si tale collectum minus quadrante minus tribus quartis circuli fuerit quod quod ex huiusmodi additione ut subtractione nascitur velut res postulat inventum primo addimus si collectum prefatum minus semicirculo extiterit aut ex eo minue inventum primum si tangentes memoratum semicirculum vicerit quodque altero horum modorum depromitur inventum quintum agnominabitur cum quo deinceps invento quinto aut residuo eius ad semicirculum et complemento inventi tertii tabulam intra lateraliter eo enim quod in angulo communi conspicitur ex quadra circuli submoto reliquum vocabitur inventum sextum. Iam demum argumento octave spere opus est quod si minus quadrante fuerit signa si plus intra quidem semicirculum manens ipsum ex 180 minue residuum quoque notato et si dimidium circulum superaverit non dum tres quartas attingens minue ex eo semicirculum reliquumque signabis. At si tres easdem quartas vicerit abicias eo ex 360 gradibus residuum signato. Tale itaque signatum quemadmodum res postulat cum semidiametro parvi circuli 19 laterali introitu infer quodque tibi in area tabule offertur inventum septimum appellabis. Illud rursus inventum septimum cum invento sexto arealem in tabulam transfer. Habebis enim in latere rubeo equationem octave spere quam querebas addendam quando argumentum octave spere minus est semicirculo minuendam vero quando argumentum tale semicirculum transcendit. At qui argumentum quando diminutus circuli equante nulla prorsus est equatio veluti etiam capitis arietis stellati principium [illegible] attingente. Dum autem quadrantem circuli vel simplicem ut triplicatam continet maxime equatio omnium numerum 10 49 offendes. Preterea si argumentum octave spere complectitur 66 26 30 aut tantumdem semicirculo [illegible] hec minutula quadam supputatione propositum efficies. Intrabis enim lateraliter cum 84 21 et 66 26 30 complementum quoque numeri

Ex parte dicti . cursus cum . x . 19 . arealiter tabule inferens quod namque in latere utroque colligitur lateraliter item cum . 66 . 26 . 30 . tabule immissum expromet equacionem octave spere quesitam addendam quoniam dum ar gumentus octave spere continet . 06 . 26 . 30 . minuenda vero quando tan tundem addit super semicirculum [illegible] Illud autem non est convenienti omisso pretereundum quod inventum sextum supra dictum ostendit magnitudinem anguli ab ecliptica celi stellati et equinoctiali circulo comprehensi idest ma xima solis declinacionem pro tunc existentem Nam quoniam caput arietis stellati nostra in parvo circulo rotatur quadammodum sectatores Thebith autumant necesse est eclipticam huiusmodi quam appellant mobilem variam ad equinoctialem circulum sortiri inclinacionem Preterea comple mentum inventi sexti si quod fuerit equale est distancie capitis cancri fixi a capite cancri mobilis Tum exempla [illegible] similibus videbuntur [illegible] Sit argumentum octave spere . 20 . gradum quero equacionem ei debitam secundum modum quo usus est Tollotanus composuit tabulas In tra lateraliter cum argumento proposito . 20 . 0 . et semidiametro parvi circuli . x . 19 . dico quod . 6 . 15 . quem cursus numerum arealiter in tabulam ducendo cum . 23 . x 6 . invenio equacionem quesitam . 3 . 59 . quanta ferme in tabella equatoria octave spere ostenditur iuxta 20 gradus argumen ti Sed esto argumentum octave spere . x4 . gradum cui secundum exquisitiorem formulam numero . 23 . 33 . 30 ut concrescat numerus introitualis . 68 . 53 . ne glectis . 30 . secundis quo calculus expedicior fiat Cum itaque cum . x . 19 . lateraliter in tabulam ducenti numeri offertur inventum primum x . 1 . Item cuius numerum . x . 19 . cum complemento sacri sui . 21 . 27 . la teraliter quoque in tabulam transferendo extrahitur arcus . 1 . 3 x . cuius complementum . 88 . 26 . arcabo inventum secundum Qua[illegible] deinde cum . 23 . 33 . lateraliter tabule inferens dico inventum tercium . 23 . 32 . propter alterius complementum . 66 . 28 . cum complemento inventi secundi . 1 . 3 x . are alium in tabula mittendo exprimitur inventum quartum . 1 . x3 . quod cursus cum . 23 . 33 . laterali introitu tabule immissum elicit numerum quintum . 3 . x1 . quem ex quadrante minoro quoniam congeries que ex argumento octa ve spere et maxima declinacione fixa ab initio calculi huius na scebatur quadrante minor extitit itaque relinquitur numerus ille . 89 . 19 . cui adiecto inventum primum ut concrescat inventum quintum . 93 . 20 . huius residuum de semicirculo . 86 . x0 . quando quoniam ma ius est quadrante cum complementa inventi tercii . 66 . 28 . lateraliter in tabulam ducens expromo . 66 . 1 x . cuius complementum . 23 . x6 . inventi sexti nomen usurpabit Id autem est magnitudo anguli ab ecli ptica mobili et equinoctiali circulo comprehensi scilicet maxima decli nacio solaris ad presentem celi stellati habitudinem Nam denuo argumentum octave spere propositum . x4 . 0 . cum x . 19 . lateraliter in tabula traducenti numeri [illegible] exhibetur inventum septimum . 3 . 3 . quod postremo cum invento sexto . 23 . x6 . arealiter tabule illatum exprimit equacionem octave spere . 1 . 30 . In abaco autem toletano ostenditur equacio [illegible] . x4 . gradibus debita . 1 . 36 . 34 . parumper a nostra calculo differens Si igitur tantulam differenciolam tantum tamque vario labore indignam censes utaris licet modo primo qui etsi rudiusculus appareat et geome triam preterreat demonstracionem eam tamen eandem et quasi indige stam supputacionem brevitate quadam non iniocunda compensat Et autem reliquam precepti huius particulam exemplari numero illustre mus Nominatur argumentum octave spere . 66 . 27 . aut . 2 . x6 . 21 . in qua sua ecliptica mobilis contingit utrumque parvum circulum Quesiturus igitur equacionem octave spere intro tabulam latera liter cum . 84 . x1 . et 66 . 21 . dicens quod in area tabule numerum illum . 66 . x . cuius item complementum . 23 . 46 arealiter in tabulam ducen do cum . x . 19 . extrahitur numerus ille scilicet . x2 . quem postremo nu merum unacum . 65 . 21 . lateraliter in tabulam mittens expressio equacionem octave spere quesitam . 9 . x8 . Finis horum canonum

Anno salutis 1 4 0 1 in studio [illegible]



cum xpo yhu [illegible]

[illegible]

| | Arcus G | Arcus M | Arcus S | Dra M | Dra S |
|---|---|---|---|---|---|
| 1 | 0 | 1 / 1 | 3 / 3 | 1 | [illegible] |
| 2 | 0 | 2 / 1 | 6 / 2 | 2 | 5 |
| 3 | 0 | 3 / 1 | 8 / 3 | 3 | 9 |
| 4 | 0 | 4 / 1 | 11 / 3 | 4 | 11 |
| 5 | 0 | 5 / 1 | 14 / 2 | 5 | 13 |
| 6 | 0 | 6 / 1 | 16 / 2 | 6 | 16 |
| 7 | 0 | 7 / 1 | 18 / 3 | 7 | 19 |
| 8 | 0 | 8 / 1 | 21 / 2 | 8 | 21 |
| 9 | 0 | 9 / 1 | 23 / 2 | 9 | 23 |
| 10 | 0 | 10 / 1 | 25 / 2 | 10 | 25 |
| 11 | 0 | 11 / 1 | 27 / 1 | 11 | 27 |
| 12 | 0 | 12 / 1 | 28 / 2 | 12 | 29 |
| 13 | 0 | 13 / 1 | 30 / 1 | 13 | 30 |
| 14 | 0 | 14 / 1 | 31 / 1 | 14 | 31 |
| 15 | 0 | 15 / 1 | 32 / 0 | 15 | 31 |
| 16 | 0 | 16 / 1 | 32 / 1 | 16 | 32 |
| 17 | 0 | 17 / 1 | 33 / 0 | 17 | 32 |
| 18 | 0 | 18 / 0 | 32 / 59 | 18 | 32 |
| 19 | 0 | 19 / 0 | 32 / 59 | 19 | 32 |
| 20 | 0 | 20 / 0 | 31 / 59 | 20 | 31 |
| 21 | 0 | 21 / 0 | 30 / 59 | 21 | 30 |
| 22 | 0 | 22 / 0 | 29 / 58 | 22 | 28 |
| 23 | 0 | 23 / 0 | 27 / 57 | 23 | 26 |
| 24 | 0 | 24 / 0 | 24 / 57 | 24 | 24 |
| 25 | 0 | 25 / 0 | 21 / 57 | 25 | 21 |
| 26 | 0 | 26 / 0 | 18 / 56 | 26 | 18 |
| 27 | 0 | 27 / 0 | 14 / 56 | 27 | 14 |
| 28 | 0 | 28 / 0 | 10 / 55 | 28 | 10 |
| 29 | 0 | 29 / 0 | 5 / 55 | 29 | 5 |
| 30 | 0 | 30 / 0 | 0 / 54 | 30 | 0 |

| | Arcus G | Arcus M | Arcus S | Dra M | Dra S |
|---|---|---|---|---|---|
| 31 | 0 | 30 / 0 | 54 / 54 | 30 | 54 |
| 32 | 0 | 31 / 0 | 48 / 53 | 31 | 47 |
| 33 | 0 | 32 / 0 | 41 / 52 | 32 | 40 |
| 34 | 0 | 33 / 0 | 33 / 52 | 33 | 33 |
| 35 | 0 | 34 / 0 | 25 / 51 | 34 | 24 |
| 36 | 0 | 35 / 0 | 16 / 50 | 35 | 16 |
| 37 | 0 | 36 / 0 | 6 / 50 | 36 | 7 |
| 38 | 0 | 36 / 0 | 56 / 49 | 36 | 56 |
| 39 | 0 | 37 / 0 | 45 / 49 | 37 | 45 |
| 40 | 0 | 38 / 0 | 34 / 48 | 38 | 34 |
| 41 | 0 | 39 / 0 | 22 / 47 | 39 | 21 |
| 42 | 0 | 40 / 0 | 9 / 46 | 40 | 8 |
| 43 | 0 | 40 / 0 | 55 / 46 | 40 | 55 |
| 44 | 0 | 41 / 0 | 41 / 44 | 41 | 40 |
| 45 | 0 | 42 / 0 | 26 / 44 | 42 | 24 |
| 46 | 0 | 43 / 0 | 10 / 44 | 43 | 9 |
| 47 | 0 | 43 / 0 | 53 / 43 | 43 | 52 |
| 48 | 0 | 44 / 0 | 35 / 42 | 44 | 35 |
| 49 | 0 | 45 / 0 | 17 / 41 | 45 | 17 |
| 50 | 0 | 45 / 0 | 58 / 40 | 45 | 57 |
| 51 | 0 | 46 / 0 | 38 / 39 | 46 | 37 |
| 52 | 0 | 47 / 0 | 17 / 38 | 47 | 16 |
| 53 | 0 | 47 / 0 | 55 / 37 | 47 | 57 |
| 54 | 0 | 48 / 0 | 32 / 37 | 48 | 33 |
| 55 | 0 | 49 / 0 | 9 / 36 | 49 | 8 |
| 56 | 0 | 49 / 0 | 45 / 34 | 49 | 44 |
| 57 | 0 | 50 / 0 | 19 / 34 | 50 | 19 |
| 58 | 0 | 50 / 0 | 53 / 33 | 50 | 53 |
| 59 | 0 | 51 / 0 | 26 / 32 | 51 | 26 |
| 60 | 0 | 51 / 0 | 58 / 31 | 51 | 57 |

| | Arcus G | Arcus M | Arcus S | Dra M | Dra S |
|---|---|---|---|---|---|
| 61 | 0 | 52 / 0 | 29 / 30 | 52 | 28 |
| 62 | 0 | 52 / 0 | 59 / 29 | 52 | 58 |
| 63 | 0 | 53 / 0 | 28 / 28 | 53 | 27 |
| 64 | 0 | 53 / 0 | 56 / 27 | 53 | 55 |
| 65 | 0 | 54 / 0 | 23 / 26 | 54 | 22 |
| 66 | 0 | 54 / 0 | 49 / 24 | 54 | 48 |
| 67 | 0 | 55 / 0 | 14 / 25 | 55 | 13 |
| 68 | 0 | 55 / 0 | 38 / 23 | 55 | 38 |
| 69 | 0 | 56 / 0 | 1 / 22 | 56 | 1 |
| 70 | 0 | 56 / 0 | 23 / 21 | 56 | 23 |
| 71 | 0 | 56 / 0 | 44 / 20 | 56 | 44 |
| 72 | 0 | 57 / 0 | 4 / 19 | 57 | 3 |
| 73 | 0 | 57 / 0 | 23 / 18 | 57 | 22 |
| 74 | 0 | 57 / 0 | 41 / 16 | 57 | 40 |
| 75 | 0 | 57 / 0 | 57 / 16 | 57 | 58 |
| 76 | 0 | 58 / 0 | 13 / 14 | 58 | 13 |
| 77 | 0 | 58 / 0 | 28 / 14 | 58 | 28 |
| 78 | 0 | 58 / 0 | 42 / 12 | 58 | 41 |
| 79 | 0 | 58 / 0 | 54 / 11 | 58 | 54 |
| 80 | 0 | 59 / 0 | 5 / 11 | 59 | 6 |
| 81 | 0 | 59 / 0 | 16 / 9 | 59 | 14 |
| 82 | 0 | 59 / 0 | 25 / 8 | 59 | 25 |
| 83 | 0 | 59 / 0 | 33 / 7 | 59 | 33 |
| 84 | 0 | 59 / 0 | 40 / 6 | 59 | 41 |
| 85 | 0 | 59 / 0 | 46 / 5 | 59 | 47 |
| 86 | 0 | 59 / 0 | 51 / 4 | 59 | 55 |
| 87 | 0 | 59 / 0 | 55 / 3 | 59 | 55 |
| 88 | 0 | 59 / 0 | 58 / 2 | 59 | 58 |
| 89 | 1 | 0 / 0 | 0 / 0 | 59 | 59 |
| 90 | 1 | 0 / 0 | 0 / 0 | 0 | 0 |

Multiplica Sinum inventum superius per Sinum cuiuslibet gradus et divide per Sinum totum

| | Arcus | | | Corda | | | Arcus | | | Corda | | | Arcus | | | Corda | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G | M | S | M | S | | G | M | S | M | S | | G | M | S | M | S |
| 1 | 0 | 2<br>2 | 6<br>5 | 1 | 2 | 31 | 1 | 1<br>1 | 48<br>47 | 30 | 53 | 61 | 1 | 44<br>1 | 57<br>0 | 52 | 28 |
| 2 | 0 | 4<br>2 | 11<br>6 | 2 | 6 | 32 | 1 | 3<br>1 | 34<br>46 | 31 | 46 | 62 | 1 | 45<br>0 | 57<br>58 | 52 | 58 |
| 3 | | 6<br>2 | 17<br>5 | 3 | 8 | 33 | | 5<br>1 | 21<br>45 | 32 | 39 | 63 | | 46<br>0 | 55<br>56 | 53 | 27 |
| 4 | | 8<br>2 | 22<br>5 | 4 | 11 | 34 | | 7<br>1 | 6<br>45 | 33 | 31 | 64 | | 47<br>0 | 51<br>54 | 53 | 55 |
| 5 | | 10<br>2 | 27<br>7 | 5 | 14 | 35 | | 8<br>1 | 49<br>43 | 34 | 24 | 65 | | 48<br>0 | 45<br>52 | 54 | 22 |
| 6 | | 12<br>2 | 32<br>5 | 6 | 17 | 36 | | 10<br>1 | 32<br>41 | 35 | 14 | 66 | | 49<br>0 | 37<br>50 | 54 | 49 |
| 7 | | 14<br>2 | 37<br>5 | 7 | 19 | 37 | | 12<br>1 | 13<br>39 | 36 | 5 | 67 | | 50<br>0 | 27<br>49 | 55 | 14 |
| 8 | | 16<br>2 | 42<br>4 | 8 | 20 | 38 | | 13<br>1 | 52<br>38 | 36 | 55 | 68 | 1 | 51<br>0 | 16<br>46 | 55 | 31 |
| 9 | | 18<br>2 | 46<br>4 | 9 | 23 | 39 | | 15<br>1 | 30<br>38 | 37 | 45 | 69 | 1 | 52<br>0 | 2<br>44 | 56 | 0 |
| 10 | | 20<br>2 | 50<br>4 | 10 | 25 | 40 | | 17<br>1 | 8<br>35 | 38 | 32 | 70 | 1 | 52<br>0 | 46<br>42 | 56 | 23 |
| 11 | | 22<br>2 | 54<br>3 | 11 | 26 | 41 | | 18<br>1 | 43<br>34 | 39 | 21 | 71 | 1 | 53<br>0 | 28<br>39 | 56 | 43 |
| 12 | | 24<br>2 | 57<br>3 | 12 | 28 | 42 | | 20<br>1 | 17<br>33 | 40 | 8 | 72 | | 54<br>0 | 7<br>38 | 57 | 4 |
| 13 | | 27<br>2 | 0<br>2 | 13 | 28 | 43 | | 21<br>1 | 50<br>31 | 40 | 54 | 73 | | 54<br>0 | 45<br>36 | 57 | 23 |
| 14 | | 29<br>2 | 2<br>1 | 14 | 30 | 44 | | 23<br>1 | 21<br>30 | 41 | 40 | 74 | | 55<br>0 | 21<br>34 | 57 | 40 |
| 15 | | 31<br>2 | 3<br>1 | 15 | 31 | 45 | 1 | 24<br>1 | 51<br>27 | 42 | 44 | 75 | | 55<br>0 | 55<br>31 | 57 | 57 |
| 16 | | 33<br>2 | 4<br>1 | 16 | 32 | 46 | 1 | 25<br>1 | 19<br>26 | 43 | 8 | 76 | | 56<br>0 | 26<br>30 | 58 | 13 |
| 17 | | 35<br>2 | 5<br>0 | 17 | 31 | 47 | 1 | 27<br>1 | 45<br>25 | 43 | 52 | 77 | | 56<br>0 | 56<br>27 | 58 | 27 |
| 18 | | 37<br>1 | 5<br>59 | 18 | 31 | 48 | | 29<br>1 | 10<br>24 | 44 | 34 | 78 | | 57<br>0 | 23<br>25 | 58 | 41 |
| 19 | | 39<br>1 | 4<br>58 | 19 | 31 | 49 | | 30<br>1 | 34<br>21 | 45 | 15 | 79 | | 57<br>0 | 48<br>23 | 58 | 54 |
| 20 | | 41<br>1 | 2<br>58 | 20 | 30 | 50 | | 31<br>1 | 55<br>20 | 45 | 57 | 80 | | 58<br>0 | 11<br>[illegible] | 59 | 5 |
| 21 | | 43<br>1 | 0<br>57 | 21 | 29 | 51 | | 33<br>1 | 15<br>18 | 46 | 37 | 81 | | 58<br>0 | 31<br>19 | 59 | 16 |
| 22 | | 44<br>1 | 57<br>56 | 22 | 27 | 52 | | 34<br>1 | 33<br>17 | 47 | 16 | 82 | | 58<br>0 | 50<br>16 | 59 | 25 |
| 23 | | 46<br>1 | 53<br>55 | 23 | 25 | 53 | | 35<br>1 | 50<br>15 | 47 | 56 | 83 | | 59<br>0 | 6<br>14 | 59 | 33 |
| 24 | | 48<br>1 | 48<br>54 | 24 | 23 | 54 | | 37<br>1 | 5<br>12 | 48 | 31 | 84 | | 59<br>0 | 20<br>12 | 59 | 40 |
| 25 | | 50<br>1 | 42<br>54 | 25 | 21 | 55 | | 38<br>1 | 17<br>12 | 49 | 9 | 85 | | 59<br>0 | 33<br>10 | 59 | 46 |
| 26 | | 52<br>1 | 36<br>52 | 26 | 17 | 56 | | 39<br>1 | 29<br>9 | 49 | 43 | 86 | | 59<br>0 | 43<br>7 | 59 | 51 |
| 27 | 0 | 54<br>1 | 28<br>52 | 27 | 13 | 57 | | 40<br>1 | 38<br>8 | 50 | 19 | 87 | | 59<br>0 | 50<br>6 | 59 | 55 |
| 28 | 0 | 56<br>1 | 20<br>50 | 28 | 9 | 58 | | 41<br>1 | 46<br>6 | 50 | 52 | 88 | | 59<br>0 | 56<br>3 | 59 | 58 |
| 29 | 0 | 58<br>1 | 10<br>50 | 29 | 4 | 59 | 1 | 42<br>1 | 52<br>3 | 51 | 24 | 89 | 1 | 59<br>0 | 59<br>1 | 59 | 59 |
| 30 | 1 | 0<br>1 | 0<br>48 | 29 | 58 | 60 | 1 | 43<br>1 | 55<br>2 | 51 | 57 | 90 | 2 | 0<br>0 | 0<br>0 | 60 | 0 |

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| | Arcus | | | Dra | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 1 | 0 | 3<br>3 | 8<br>9 | 1 | 3 |
| 2 | 0 | 6<br>3 | 17<br>8 | 2 | 5 |
| 3 | 0 | 9<br>3 | 25<br>8 | 3 | 8 |
| 4 | | 12<br>3 | 33<br>8 | 4 | 11 |
| 5 | | 15<br>3 | 41<br>8 | 5 | 13 |
| 6 | | 18<br>3 | 49<br>7 | 6 | 15 |
| 7 | | 21<br>3 | 56<br>6 | 7 | 18 |
| 8 | | 25<br>3 | 2<br>7 | 8 | 21 |
| 9 | | 28<br>3 | 9<br>6 | 9 | 22 |
| 10 | | 31<br>3 | 15<br>5 | 10 | 24 |
| 11 | | 34<br>3 | 20<br>5 | 11 | 26 |
| 12 | | 37<br>3 | 25<br>3 | 12 | 27 |
| 13 | | 40<br>3 | 28<br>4 | 13 | 29 |
| 14 | | 43<br>3 | 32<br>2 | 14 | 29 |
| 15 | | 46<br>3 | 34<br>2 | 15 | 30 |
| 16 | | 49<br>3 | 36<br>0 | 16 | 30 |
| 17 | | 52<br>3 | 36<br>0 | 17 | 31 |
| 18 | 0 | 55<br>2 | 30<br>59 | 18 | 31 |
| 19 | 0 | 58<br>2 | 35<br>57 | 19 | 30 |
| 20 | 1 | 1<br>2 | 32<br>57 | 20 | 30 |
| 21 | 1 | 4<br>2 | 29<br>59 | 21 | 28 |
| 22 | | 7<br>2 | 34<br>54 | 22 | 27 |
| 23 | | 10<br>2 | 18<br>53 | 23 | 25 |
| 24 | | 13<br>2 | 11<br>52 | 24 | 22 |
| 25 | | 16<br>2 | 3<br>50 | 25 | 19 |
| 26 | | 18<br>2 | 53<br>48 | 26 | 15 |
| 27 | | 21<br>2 | 41<br>48 | 27 | 12 |
| 28 | | 24<br>2 | 29<br>44 | 28 | 7 |
| 29 | 1 | 27<br>2 | 14<br>44 | 29 | 3 |
| 30 | 1 | 29<br>2 | 48<br>43 | 29 | 48 |
| 31 | 1 | 32<br>2 | 41<br>40 | 30 | 51 |
| 32 | 1 | 35<br>2 | 21<br>39 | 31 | 45 |
| 33 | | 38<br>2 | 0<br>37 | 32 | 38 |
| 34 | | 40<br>2 | 37<br>36 | 33 | 31 |
| 35 | | 43<br>2 | 13<br>33 | 34 | 22 |
| 36 | | 45<br>2 | 46<br>32 | 35 | 14 |
| 37 | | 48<br>2 | 18<br>29 | 36 | 4 |
| 38 | | 50<br>2 | 47<br>28 | 36 | 54 |
| 39 | | 53<br>2 | 15<br>24 | 37 | 43 |
| 40 | 1. | 55<br>2 | 40<br>24 | 38 | 32 |
| 41 | 1 | 58<br>2 | 4<br>21 | 39 | 15 |
| 42 | 2 | 0<br>2 | 25<br>19 | 40 | 6 |
| 43 | 2 | 2<br>2 | 44<br>17 | 40 | 53 |
| 44 | | 5<br>2 | 1<br>14 | 41 | 38 |
| 45 | | 7<br>2 | 15<br>12 | 42 | 23 |
| 46 | | 9<br>2 | 27<br>10 | 43 | 8 |
| 47 | 2 | 11<br>2 | 37<br>7 | 43 | 51 |
| 48 | | 13<br>2 | 44<br>5 | 44 | 33 |
| 49 | | 15<br>2 | 49<br>3 | 45 | 15 |
| 50 | | 17<br>2 | 52<br>0 | 45 | 55 |
| 51 | | 19<br>1 | 52<br>57 | 46 | 35 |
| 52 | | 21<br>1 | 49<br>54 | 47 | 15 |
| 53 | | 23<br>1 | 44<br>52 | 47 | 53 |
| 54 | | 25<br>1 | 30<br>50 | 48 | 31 |
| 55 | | 27<br>1 | 26<br>46 | 49 | 7 |
| 56 | | 29<br>1 | 12<br>45 | 49 | 43 |
| 57 | | 30<br>1 | 57<br>41 | 50 | 17 |
| 58 | | 32<br>1 | 38<br>39 | 50 | 51 |
| 59 | 2 | 34<br>1 | 17<br>34 | 51 | 24 |
| 60 | 2 | 35<br>1 | 52<br>33 | 51 | 56 |
| 61 | 2 | 37<br>1 | 35<br>30 | 52 | 27 |
| 62 | 2 | 38<br>1 | 55<br>27 | 52 | 57 |
| 63 | | 40<br>1 | 22<br>24 | 53 | 26 |
| 64 | | 41<br>1 | 40<br>21 | 53 | 54 |
| 65 | | 43<br>1 | 7<br>19 | 54 | 22 |
| 66 | | 44<br>1 | 20<br>15 | 54 | 47 |
| 67 | | 45<br>1 | 41<br>12 | 55 | 13 |
| 68 | | 46<br>1 | 53<br>9 | 55 | 37 |
| 69 | | 48<br>1 | 2<br>6 | 56 | 0 |
| 70 | 2 | 49<br>1 | 8<br>3 | 56 | 22 |
| 71 | 2 | 50<br>1 | 11<br>0 | 56 | 43 |
| 72 | | 51<br>0 | 11<br>57 | 57 | 3 |
| 73 | | 52<br>0 | 8<br>53 | 57 | 22 |
| 74 | | 53<br>0 | 1<br>51 | 57 | 40 |
| 75 | | 53<br>0 | 52<br>47 | 57 | 57 |
| 76 | | 54<br>0 | 39<br>44 | 58 | 13 |
| 77 | | 55<br>0 | 23<br>41 | 58 | 27 |
| 78 | | 56<br>0 | 4<br>38 | 58 | 49 |
| 79 | | 56<br>0 | 42<br>34 | 58 | 53 |
| 80 | | 57<br>0 | 16<br>31 | 59 | 5 |
| 81 | | 57<br>0 | 47<br>28 | 59 | 15 |
| 82 | | 58<br>0 | 15<br>24 | 59 | 25 |
| 83 | | 58<br>0 | 39<br>22 | 59 | 33 |
| 84 | | 59<br>0 | 1<br>18 | 59 | 40 |
| 85 | | 59<br>0 | 19<br>15 | 59 | 46 |
| 86 | | 59<br>0 | 34<br>11 | 59 | 51 |
| 87 | | 59<br>0 | 45<br>9 | 59 | 55 |
| 88 | 2 | 59<br>0 | 54<br>4 | 59 | 57 |
| 89 | 2 | 59<br>0 | 58<br>2 | 60 | 0 |
| 90 | 3 | 0<br>0 | 0<br>0 | 60 | 0 |

λ

4̃

| | Arcus G | M | 2ª | Dia M | 2 |
|---|---|---|---|---|---|
| 1 | 0 | 4 / 4 | 11 / 11 | 1 | 3 |
| 2 | 0 | 8 / 4 | 22 / 11 | 2 | 5 |
| 3 | | 12 / 4 | 33 / 11 | 3 | 8 |
| 4 | | 16 / 4 | 44 / 10 | 4 | 10 |
| 5 | | 20 / 4 | 54 / 10 | 5 | 13 |
| 6 | | 25 / 4 | 4 / 10 | 6 | 15 |
| 7 | | 29 / 4 | 14 / 9 | 7 | 17 |
| 8 | | 33 / 4 | 23 / 8 | 8 | 19 |
| 9 | | 37 / 4 | 31 / 8 | 9 | 21 |
| 10 | | 41 / 4 | 39 / 7 | 10 | 23 |
| 11 | | 45 / 4 | 46 / 6 | 11 | 24 |
| 12 | | 49 / 4 | 52 / 5 | 12 | 26 |
| 13 | 0 | 53 / 4 | 57 / 4 | 13 | 27 |
| 14 | 0 | 58 / 4 | 1 / 3 | 14 | 28 |
| 15 | 1 | 2 / 4 | 4 / 2 | 15 | 29 |
| 16 | 1 | 6 / 4 | 6 / 1 | 16 | 30 |
| 17 | | 10 / 4 | 7 / 0 | 17 | 30 |
| 18 | | 14 / 3 | 7 / 58 | 18 | 29 |
| 19 | | 18 / 3 | 5 / 57 | 19 | 29 |
| 20 | | 22 / 3 | 2 / 55 | 20 | 28 |
| 21 | | 25 / 3 | 57 / 54 | 21 | 27 |
| 22 | | 29 / 3 | 51 / 52 | 22 | 25 |
| 23 | | 33 / 3 | 43 / 50 | 23 | 23 |
| 24 | | 37 / 3 | 33 / 49 | 24 | 21 |
| 25 | | 41 / 3 | 22 / 46 | 25 | 17 |
| 26 | | 45 / 3 | 8 / 45 | 26 | 15 |
| 27 | | 48 / 3 | 53 / 43 | 27 | 11 |
| 28 | | 52 / 3 | 36 / 41 | 28 | 6 |
| 29 | 1 | 56 / 3 | 17 / 39 | 29 | 1 |
| 30 | 1 | 59 / 3 | 56 / 36 | 29 | 56 |

| | Arcus G | M | 2ª | Dia M | 2 |
|---|---|---|---|---|---|
| 31 | 2 | 3 / 3 | 32 / 34 | 30 | 50 |
| 32 | 2 | 7 / 3 | 6 / 32 | 31 | 44 |
| 33 | | 10 / 3 | 38 / 30 | 32 | 37 |
| 34 | | 14 / 3 | 8 / 27 | 33 | 29 |
| 35 | | 17 / 3 | 35 / 25 | 34 | 21 |
| 36 | | 21 / 3 | 0 / 24 | 35 | 11 |
| 37 | | 24 / 3 | 32 / 19 | 36 | 2 |
| 38 | | 27 / 3 | 42 / 17 | 36 | 52 |
| 39 | | 30 / 3 | 58 / 19 | 37 | 41 |
| 40 | | 34 / 3 | 12 / 11 | 38 | 30 |
| 41 | | 37 / 3 | 22 / 8 | 39 | 18 |
| 42 | | 40 / 3 | 31 / 6 | 40 | 5 |
| 43 | | 43 / 3 | 37 / 2 | 40 | 51 |
| 44 | | 46 / 2 | 39 / 39 | 41 | 37 |
| 45 | | 49 / 2 | 38 / 47 | 42 | 22 |
| 46 | | 52 / 2 | 35 / 43 | 43 | 5 |
| 47 | 2 | 55 / 2 | 28 / 39 | 43 | 49 |
| 48 | 2 | 58 / 2 | 17 / 27 | 44 | 32 |
| 49 | 3 | 1 / 2 | 4 / 43 | 45 | 13 |
| 50 | | 3 / 2 | 27 / 20 | 45 | 55 |
| 51 | | 6 / 2 | 27 / 37 | 46 | 35 |
| 52 | | 9 / 2 | [illegible] / 23 | 47 | 13 |
| 53 | | 11 / 2 | 37 / 30 | 47 | 52 |
| 54 | | 14 / 2 | 7 / 26 | 48 | 29 |
| 55 | | 16 / 2 | 33 / 22 | 49 | 5 |
| 56 | | 18 / 2 | 55 / 19 | 49 | 42 |
| 57 | | 21 / 2 | 14 / 19 | 50 | 16 |
| 58 | | 23 / 2 | 29 / 12 | 50 | 50 |
| 59 | | 25 / 2 | 41 / 7 | 51 | 23 |
| 60 | 3 | 27 / 2 | 44 / 4 | 51 | 55 |

| | Arcus G | M | 2ª | Dia M | 2 |
|---|---|---|---|---|---|
| 61 | 3 | 29 / 2 | 52 / 0 | 52 | 26 |
| 62 | 3 | 31 / 1 | 52 / 56 | 52 | 57 |
| 63 | | 33 / 1 | 48 / 53 | 53 | 26 |
| 64 | | 35 / 1 | 41 / 48 | 53 | 53 |
| 65 | | 37 / 1 | 29 / 44 | 54 | 21 |
| 66 | | 39 / 1 | 13 / 41 | 54 | 47 |
| 67 | | 40 / 1 | 54 / 36 | 55 | 12 |
| 68 | | 42 / 1 | 30 / 32 | 55 | 36 |
| 69 | | 44 / 1 | 2 / 28 | 56 | 0 |
| 70 | | 45 / 1 | 30 / 24 | 56 | 22 |
| 71 | | 46 / 1 | 54 / 20 | 56 | 43 |
| 72 | | 48 / 1 | 14 / 16 | 57 | 3 |
| 73 | | 49 / 1 | 30 / 10 | 57 | 22 |
| 74 | | 50 / 1 | 41 / 8 | 57 | 40 |
| 75 | | 51 / 1 | 44 / 3 | 57 | 56 |
| 76 | | 52 / 0 | 52 / 48 | 58 | 12 |
| 77 | | 53 / 0 | 50 / 54 | 58 | 27 |
| 78 | | 54 / 0 | 44 / 50 | 58 | 41 |
| 79 | | 55 / 0 | 35 / 46 | 58 | 54 |
| 80 | | 56 / 0 | 21 / 46 | 59 | 5 |
| 81 | | 57 / 0 | 2 / 38 | 59 | 16 |
| 82 | | 57 / 0 | 40 / 32 | 59 | 24 |
| 83 | | 58 / 0 | 42 / 29 | 59 | 33 |
| 84 | | 58 / 0 | 41 / 24 | 59 | 40 |
| 85 | | 59 / 0 | 5 / 20 | 59 | 46 |
| 86 | | 59 / 0 | 25 / 15 | 59 | 51 |
| 87 | | 59 / 0 | 40 / 11 | 59 | 55 |
| 88 | 3 | 59 / 0 | 51 / 7 | 59 | 58 |
| 89 | 3 | 59 / 0 | 58 / 2 | 59 | 59 |
| 90 | 4 | 0 / 0 | 0 / 0 | 60 | 0 |

# 4

| | Ascens G | M | S | M (diff) | S (diff) | dia M | dia S |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 5 | 14 | 5 | 13 | 1 | 2 |
| 2 | 0 | 10 | 27 | 5 | 14 | 2 | 7 |
| 3 | | 15 | 41 | 5 | 13 | 3 | 8 |
| 4 | | 20 | 54 | 5 | 13 | 4 | 10 |
| 5 | | 26 | 7 | 5 | 12 | 5 | 12 |
| 6 | | 31 | 19 | 5 | 12 | 6 | 14 |
| 7 | | 36 | 31 | 5 | 11 | 7 | 17 |
| 8 | | 41 | 42 | 5 | 10 | 8 | 19 |
| 9 | 0 | 46 | 52 | 5 | 10 | 9 | 21 |
| 10 | 0 | 52 | 2 | 5 | 8 | 10 | 22 |
| 11 | 0 | 57 | 10 | 5 | 8 | 11 | 24 |
| 12 | 1 | 2 | 18 | 5 | 6 | 12 | 25 |
| 13 | | 7 | 24 | 5 | 5 | 13 | 27 |
| 14 | | 12 | 29 | 5 | 4 | 14 | 28 |
| 15 | | 17 | 33 | 5 | 3 | 15 | 28 |
| 16 | | 22 | 36 | 5 | 1 | 16 | 28 |
| 17 | | 27 | 37 | 4 | 59 | 17 | 28 |
| 18 | | 32 | 36 | 4 | 58 | 18 | 28 |
| 19 | | 37 | 34 | 4 | 56 | 19 | 27 |
| 20 | | 42 | 30 | 4 | 54 | 20 | 26 |
| 21 | | 47 | 24 | 4 | 52 | 21 | 24 |
| 22 | 1 | 52 | 16 | 4 | 50 | 22 | 23 |
| 23 | 1 | 57 | 6 | 4 | 38 | 23 | 21 |
| 24 | 2 | 1 | 44 | 4 | 24 | 24 | 18 |
| 25 | 2 | 6 | 39 | 4 | 44 | 25 | 16 |
| 26 | | 11 | 33 | 4 | 41 | 26 | 12 |
| 27 | | 16 | 4 | 4 | 38 | 27 | 8 |
| 28 | | 20 | 42 | 4 | 30 | 28 | 4 |
| 29 | | 24 | 18 | 4 | 32 | 28 | 59 |
| 30 | | 29 | 45 | 4 | 36 | 29 | 53 |
| 31 | 2 | 34 | 12 | 4 | 28 | 30 | 48 |
| 32 | | 38 | 40 | 4 | 24 | 31 | 41 |
| 33 | | 43 | 14 | 4 | 22 | 32 | 34 |
| 34 | | 47 | 37 | 4 | 19 | 33 | 26 |
| 35 | 2 | 51 | 56 | 4 | 14 | 34 | 18 |
| 36 | 2 | 56 | 11 | 4 | 13 | 35 | 10 |
| 37 | 3 | 0 | 24 | 4 | 9 | 36 | 0 |
| 38 | 3 | 4 | 33 | 4 | 6 | 36 | 50 |
| 39 | | 8 | 39 | 4 | 3 | 37 | 39 |
| 40 | | 12 | 42 | 3 | 49 | 38 | 27 |
| 41 | | 16 | 41 | 3 | 44 | 39 | 14 |
| 42 | | 20 | 36 | 3 | 42 | 40 | 3 |
| 43 | | 24 | 28 | 3 | 48 | 40 | 49 |
| 44 | | 28 | 16 | 3 | 44 | 41 | 34 |
| 45 | 3 | 32 | 0 | 3 | 40 | 42 | 19 |
| 46 | 3 | 35 | 40 | 3 | 37 | 43 | 4 |
| 47 | 3 | 39 | 17 | 3 | 32 | 43 | 47 |
| 48 | | 42 | 49 | 3 | 28 | 44 | 30 |
| 49 | | 46 | 17 | 3 | 24 | 45 | 12 |
| 50 | | 49 | 41 | 3 | 20 | 45 | 52 |
| 51 | | 53 | 2 | 3 | 14 | 46 | 32 |
| 52 | | 56 | 17 | 3 | 12 | 47 | 12 |
| 53 | 3 | 59 | 29 | 3 | 7 | 47 | [illegible] |
| 54 | 4 | 2 | 36 | 3 | 2 | 48 | 38 |
| 55 | 4 | 5 | 38 | 2 | 49 | 49 | 4 |
| 56 | | 8 | 37 | 2 | 43 | 49 | 40 |
| 57 | | 11 | 30 | 2 | 49 | 50 | 18 |
| 58 | | 14 | 19 | 2 | 45 | 50 | 49 |
| 59 | | 17 | 4 | 2 | 39 | 51 | 22 |
| 60 | 4 | 19 | 42 | 2 | 34 | 51 | 54 |
| 61 | 4 | 22 | 18 | 2 | 31 | 52 | 26 |
| 62 | | 24 | 49 | 2 | 24 | 52 | 55 |
| 63 | | 27 | 14 | 2 | 20 | 53 | 24 |
| 64 | | 29 | 34 | 2 | 16 | 53 | 43 |
| 65 | | 31 | 50 | 2 | 10 | 54 | 20 |
| 66 | | 34 | 0 | 2 | 6 | 54 | 47 |
| 67 | | 36 | 6 | 2 | 0 | 55 | 11 |
| 68 | 4 | 38 | 6 | 1 | 40 | 55 | 36 |
| 69 | 4 | 40 | 2 | 1 | 50 | 55 | 49 |
| 70 | 4 | 41 | 52 | 1 | 24 | 56 | 21 |
| 71 | 4 | 43 | 37 | 1 | 40 | 56 | 42 |
| 72 | | 44 | 17 | 1 | 34 | 57 | 2 |
| 73 | | 46 | 52 | 1 | 29 | 57 | 21 |
| 74 | | 48 | 21 | 1 | 24 | 57 | 39 |
| 75 | | 49 | 45 | 1 | 19 | 57 | 46 |
| 76 | | 51 | 4 | 1 | 13 | 58 | 12 |
| 77 | | 52 | 17 | 1 | 9 | 58 | 27 |
| 78 | | 53 | 26 | 1 | 3 | 58 | 40 |
| 79 | | 54 | 29 | 0 | 57 | 58 | 43 |
| 80 | | 55 | 26 | 0 | 52 | 59 | 4 |
| 81 | | 56 | 18 | 0 | 46 | 59 | 14 |
| 82 | | 57 | 4 | 0 | 41 | 59 | 24 |
| 83 | | 57 | 45 | 0 | 36 | 59 | 33 |
| 84 | | 58 | 21 | 0 | 30 | 59 | 40 |
| 85 | | 58 | 51 | 0 | 24 | 59 | 46 |
| 86 | | 59 | 15 | 0 | 19 | 59 | 41 |
| 87 | | 59 | 34 | 0 | 14 | 59 | 44 |
| 88 | 4 | 59 | 48 | 0 | 8 | 59 | 48 |
| 89 | 4 | 59 | 57 | 0 | 3 | 60 | 0 |
| 90 | 5 | 0 | 0 | 0 | 0 | 60 | 0 |

| | Azruk Dra | | | | |
|---|---|---|---|---|---|
| | G | M̃ | S̃ | m | s |
| 1 | 0 | 6<br>6 | 16<br>16 | 1 | 2 |
| 2 | 0 | 12<br>6 | 32<br>17 | 2 | 4 |
| 3 | | 18<br>6 | 49<br>14 | 3 | 7 |
| 4 | | 25<br>6 | 3<br>14 | 4 | 10 |
| 5 | | 31<br>6 | 19<br>14 | 5 | 12 |
| 6 | | 37<br>6 | 35<br>14 | 6 | 14 |
| 7 | | 43<br>6 | 48<br>13 | 7 | 16 |
| 8 | | 50<br>6 | 1<br>12 | 8 | 18 |
| 9 | 0 | 56<br>6 | 13<br>11 | 9 | 20 |
| 10 | 1 | 2<br>6 | 24<br>10 | 10 | 22 |
| 11 | 1 | 8<br>6 | 34<br>9 | 11 | 23 |
| 12 | | 14<br>6 | 43<br>8 | 12 | 24 |
| 13 | | 20<br>6 | 51<br>6 | 13 | 25 |
| 14 | | 26<br>6 | 57<br>4 | 14 | 25 |
| 15 | | 33<br>6 | 1<br>3 | 15 | 26 |
| 16 | | 39<br>6 | 4<br>1 | 16 | 26 |
| 17 | | 45<br>5 | 5<br>59 | 17 | 26 |
| 18 | | 51<br>5 | 4<br>57 | 18 | 26 |
| 19 | 1 | 57<br>5 | 1<br>55 | 19 | 25 |
| 20 | 2 | 2<br>5 | 56<br>53 | 20 | 24 |
| 21 | | 8<br>5 | 49<br>50 | 21 | 22 |
| 22 | | 14<br>5 | 39<br>48 | 22 | 21 |
| 23 | | 20<br>5 | 27<br>45 | 23 | 19 |
| 24 | | 26<br>5 | 12<br>43 | 24 | 16 |
| 25 | | 31<br>5 | 55<br>40 | 25 | 13 |
| 26 | | 37<br>5 | 35<br>37 | 26 | 10 |
| 27 | | 43<br>5 | 12<br>34 | 27 | 6 |
| 28 | | 48<br>5 | 46<br>31 | 28 | 2 |
| 29 | 2 | 54<br>5 | 17<br>28 | 28 | 57 |
| 30 | 2 | 59<br>5 | 45<br>25 | 29 | 52 |

| | Azruk Dra | | | | |
|---|---|---|---|---|---|
| | G | M̃ | S̃ | m | s |
| 31 | 3 | 5<br>5 | 10<br>20 | 30 | 45 |
| 32 | 3 | 10<br>5 | 31<br>18 | 31 | 39 |
| 33 | | 15<br>5 | 49<br>15 | 32 | 33 |
| 34 | | 21<br>5 | 3<br>11 | 33 | 28 |
| 35 | | 26<br>5 | 14<br>7 | 34 | 16 |
| 36 | | 31<br>5 | 21<br>3 | 35 | 7 |
| 37 | | 36<br>4 | 24<br>59 | 35 | 58 |
| 38 | | 41<br>4 | 23<br>55 | 36 | 47 |
| 39 | | 46<br>4 | 18<br>51 | 37 | 37 |
| 40 | | 51<br>4 | 9<br>47 | 38 | 26 |
| 41 | 3 | 55<br>4 | 56<br>43 | 39 | 13 |
| 42 | 4 | 0<br>4 | 39<br>38 | 40 | 0 |
| 43 | 4 | 5<br>4 | 17<br>33 | 40 | 46 |
| 44 | | 9<br>4 | 50<br>29 | 41 | 33 |
| 45 | | 14<br>4 | 19<br>24 | 42 | 18 |
| 46 | | 18<br>4 | 44<br>20 | 43 | 1 |
| 47 | | 23<br>4 | 4<br>15 | 43 | 45 |
| 48 | | 27<br>4 | 19<br>10 | 44 | 27 |
| 49 | | 31<br>4 | 29<br>5 | 45 | 9 |
| 50 | | 35<br>4 | 34<br>0 | 45 | 50 |
| 51 | | 39<br>3 | 34<br>55 | 46 | 31 |
| 52 | | 43<br>3 | 29<br>50 | 47 | 10 |
| 53 | | 47<br>3 | 19<br>45 | 47 | 48 |
| 54 | | 51<br>3 | 4<br>39 | 48 | 25 |
| 55 | 4 | 54<br>3 | 43<br>34 | 49 | 3 |
| 56 | 4 | 58<br>3 | 17<br>28 | 49 | 38 |
| 57 | 5 | 1<br>3 | 45<br>23 | 50 | 12 |
| 58 | | 5<br>3 | 8<br>18 | 50 | 48 |
| 59 | | 8<br>3 | 26<br>12 | 51 | 20 |
| 60 | 5 | 11<br>3 | 38<br>6 | 51 | 52 |

| | Azruk Dra | | | | |
|---|---|---|---|---|---|
| | G | M̃ | S̃ | m | s |
| 61 | 5 | 14<br>3 | 44<br>0 | 52 | 23 |
| 62 | 5 | 17<br>2 | 44<br>54 | 52 | 54 |
| 63 | | 20<br>2 | 38<br>49 | 53 | 24 |
| 64 | | 23<br>2 | 27<br>43 | 53 | 52 |
| 65 | | 26<br>2 | 10<br>37 | 54 | 19 |
| 66 | | 28<br>2 | 47<br>30 | 54 | 45 |
| 67 | | 31<br>2 | 17<br>25 | 55 | 11 |
| 68 | | 33<br>2 | 42<br>19 | 55 | 35 |
| 69 | | 36<br>2 | 1<br>12 | 55 | 57 |
| 70 | | 38<br>2 | 13<br>6 | 56 | 20 |
| 71 | | 40<br>2 | 19<br>0 | 56 | 42 |
| 72 | | 42<br>1 | 19<br>54 | 57 | 2 |
| 73 | | 44<br>1 | 13<br>47 | 57 | 21 |
| 74 | | 46<br>1 | 0<br>41 | 57 | 39 |
| 75 | | 47<br>1 | 41<br>35 | 57 | 56 |
| 76 | | 49<br>1 | 16<br>28 | 58 | 12 |
| 77 | | 50<br>1 | 44<br>22 | 58 | 27 |
| 78 | | 52<br>1 | 6<br>16 | 58 | 40 |
| 79 | | 53<br>1 | 22<br>9 | 58 | 53 |
| 80 | | 54<br>1 | 31<br>2 | 59 | 4 |
| 81 | | 55<br>0 | 33<br>56 | 59 | 15 |
| 82 | | 56<br>0 | 29<br>49 | 59 | 24 |
| 83 | | 57<br>0 | 18<br>43 | 59 | 33 |
| 84 | | 58<br>0 | 1<br>36 | 59 | 40 |
| 85 | | 58<br>0 | 37<br>30 | 59 | 47 |
| 86 | | 59<br>0 | 7<br>23 | 59 | 51 |
| 87 | | 59<br>0 | 30<br>17 | 59 | 55 |
| 88 | 5 | 59<br>0 | 47<br>10 | 59 | 57 |
| 89 | 5 | 59<br>0 | 57<br>3 | 59 | 59 |
| 90 | 6 | 0<br>0 | 0<br>0 | 60 | 0 |

# A

| | Arcus dia | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | S |
| 1 | 0 | 7 / 7 | 18 / 19 | 1 | 3 |
| 2 | 0 | 14 / 7 | 37 / 19 | 2 | 5 |
| 3 | | 21 / 7 | 56 / 18 | 3 | 6 |
| 4 | | 29 / 7 | 14 / 17 | 4 | 9 |
| 5 | | 36 / 7 | 31 / 17 | 5 | 11 |
| 6 | | 44 / 7 | 48 / 16 | 6 | 13 |
| 7 | | 51 / 7 | 4 / 15 | 7 | 15 |
| 8 | 0 | 58 / 7 | 19 / 14 | 8 | 17 |
| 9 | 1 | 5 / 7 | 33 / 13 | 9 | 18 |
| 10 | 1 | 12 / 7 | 40 / 11 | 10 | 19 |
| 11 | 1 | 19 / 7 | 57 / 10 | 11 | 21 |
| 12 | | 27 / 7 | 7 / 9 | 12 | 22 |
| 13 | | 34 / 7 | 16 / 6 | 13 | 23 |
| 14 | | 41 / 7 | 22 / 5 | 14 | 24 |
| 15 | | 48 / 7 | 27 / 3 | 15 | 25 |
| 16 | 1 | 55 / 7 | 30 / 1 | 16 | 25 |
| 17 | 2 | 2 / 6 | 31 / 59 | 17 | 24 |
| 18 | | 9 / 6 | 30 / 56 | 18 | 24 |
| 19 | | 16 / 6 | 26 / 54 | 19 | 23 |
| 20 | | 23 / 6 | 20 / 51 | 20 | 22 |
| 21 | | 30 / 6 | 11 / 49 | 21 | 21 |
| 22 | | 37 / 6 | 0 / 46 | 22 | 19 |
| 23 | | 43 / 6 | 46 / 43 | 23 | 18 |
| 24 | | 50 / 6 | 28 / 40 | 24 | 14 |
| 25 | 2 | 57 / 6 | 8 / 37 | 25 | 11 |
| 26 | 3 | 3 / 6 | 44 / 33 | 26 | 7 |
| 27 | | 10 / 6 | 18 / 30 | 27 | 3 |
| 28 | | 16 / 6 | 48 / 26 | 27 | 59 |
| 29 | | 23 / 6 | 14 / 22 | 28 | 54 |
| 30 | | 29 / 6 | 37 / 18 | 29 | 48 |

| | Arcus dia | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | S |
| 31 | 3 | 35 / 6 | 55 / 15 | 30 | 43 |
| 32 | | 42 / 6 | 10 / 11 | 31 | 36 |
| 33 | | 48 / 6 | 21 / 6 | 32 | 29 |
| 34 | 3 | 54 / 6 | 27 / 3 | 33 | 22 |
| 35 | 4 | 0 / 5 | 30 / 58 | 34 | 13 |
| 36 | | 6 / 5 | 28 / 54 | 35 | 4 |
| 37 | | 12 / 5 | 22 / 48 | 35 | 54 |
| 38 | | 18 / 5 | 10 / 45 | 36 | 45 |
| 39 | | 23 / 5 | 55 / 40 | 37 | 34 |
| 40 | | 29 / 5 | 35 / 34 | 38 | 22 |
| 41 | | 35 / 5 | 9 / 30 | 39 | 10 |
| 42 | | 40 / 5 | 39 / 24 | 39 | 57 |
| 43 | | 46 / 5 | 3 / 20 | 40 | 44 |
| 44 | | 51 / 5 | 23 / 14 | 41 | 29 |
| 45 | 4 | 56 / 5 | 27 / 8 | 42 | 14 |
| 46 | 5 | 1 / 5 | 45 / 4 | 42 | 59 |
| 47 | | 6 / 4 | 49 / 57 | 43 | 42 |
| 48 | | 11 / 4 | 46 / 52 | 44 | 25 |
| 49 | | 16 / 4 | 38 / 46 | 45 | 7 |
| 50 | | 21 / 4 | 28 / 41 | 45 | 48 |
| 51 | | 26 / 4 | 5 / 34 | 46 | 28 |
| 52 | | 30 / 4 | 39 / 28 | 47 | 8 |
| 53 | | 35 / 4 | 7 / 22 | 47 | 46 |
| 54 | | 39 / 4 | 29 / 17 | 48 | 24 |
| 55 | | 43 / 4 | 46 / 9 | 49 | 0 |
| 56 | | 47 / 4 | 55 / 4 | 49 | 37 |
| 57 | | 51 / 3 | 59 / 57 | 50 | 11 |
| 58 | 5 | 55 / 3 | 56 / 50 | 50 | 45 |
| 59 | 5 | 59 / 3 | 26 / 44 | 51 | 19 |
| 60 | 6 | 3 / 3 | 30 / 37 | 51 | 51 |

| | Arcus dia | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | S |
| 61 | 6 | 7 / 3 | 7 / 31 | 52 | 23 |
| 62 | 6 | 10 / 3 | 38 / 24 | 52 | 53 |
| 63 | | 14 / 3 | 2 / 17 | 53 | 22 |
| 64 | | 17 / 3 | 19 / 10 | 53 | 50 |
| 65 | | 20 / 3 | 29 / 3 | 54 | 17 |
| 66 | | 23 / 2 | 32 / 56 | 54 | 44 |
| 67 | | 26 / 2 | 28 / 49 | 55 | 19 |
| 68 | | 29 / 2 | 17 / 41 | 55 | 33 |
| 69 | | 31 / 2 | 58 / 35 | 55 | 58 |
| 70 | | 34 / 2 | 33 / 28 | 56 | 20 |
| 71 | | 37 / 2 | 1 / 20 | 56 | 40 |
| 72 | | 39 / 2 | 21 / 13 | 57 | 1 |
| 73 | | 41 / 2 | 34 / 5 | 57 | 20 |
| 74 | | 43 / 1 | 39 / 58 | 57 | 38 |
| 75 | | 45 / 1 | 37 / 51 | 57 | 54 |
| 76 | | 47 / 1 | 28 / 43 | 58 | 11 |
| 77 | | 49 / 1 | 11 / 35 | 58 | 26 |
| 78 | | 50 / 1 | 46 / 29 | 58 | 40 |
| 79 | | 52 / 1 | 15 / 20 | 58 | 52 |
| 80 | | 53 / 1 | 35 / 13 | 59 | 4 |
| 81 | | 54 / 1 | 58 / 5 | 59 | 15 |
| 82 | | 55 / 0 | 56 / 58 | 59 | 25 |
| 83 | | 56 / 0 | 41 / 50 | 59 | 33 |
| 84 | | 57 / 0 | 41 / 43 | 59 | 40 |
| 85 | | 58 / 0 | 24 / 34 | 59 | 46 |
| 86 | | 58 / 0 | 58 / 27 | 59 | 51 |
| 87 | | 59 / 0 | 25 / 19 | 59 | 55 |
| 88 | | 59 / 0 | 44 / 12 | 59 | 58 |
| 89 | 6 | 59 / 0 | 56 / 4 | 59 | 59 |
| 90 | 7 | 0 / 0 | 0 / 0 | 60 | 0 |

| | Arcus dia | | | | |
|---|---|---|---|---|---|
| | S | m̄ | z | m | z |
| 1 | 0 | 8/6 | 21/21 | 1 | 2 |
| 2 | | 16/8 | 42/20 | 2 | 4 |
| 3 | | 25/8 | 2/21 | 3 | 7 |
| 4 | | 33/8 | 23/19 | 4 | 8 |
| 5 | | 41/8 | 42/19 | 5 | 10 |
| 6 | | 50/8 | 1/18 | 6 | 12 |
| 7 | 0 | 58/8 | 19/17 | 7 | 14 |
| 8 | 1 | 6/8 | 36/15 | 8 | 15 |
| 9 | | 14/8 | 51/14 | 9 | 17 |
| 10 | | 23/8 | 5/13 | 10 | 19 |
| 11 | | 31/8 | 18/11 | 11 | 20 |
| 12 | | 39/8 | 29/10 | 12 | 21 |
| 13 | | 47/8 | 39/7 | 13 | 21 |
| 14 | 1 | 55/8 | 46/6 | 14 | 22 |
| 15 | 2 | 3/8 | 52/3 | 15 | 22 |
| 16 | | 11/8 | 55/0 | 16 | 22 |
| 17 | | 19/7 | 55/59 | 17 | 22 |
| 18 | | 27/7 | 54/55 | 18 | 21 |
| 19 | | 35/7 | 49/53 | 19 | 21 |
| 20 | | 43/7 | 42/50 | 20 | 19 |
| 21 | | 51/7 | 32/47 | 21 | 18 |
| 22 | 2 | 59/7 | 19/43 | 22 | 15 |
| 23 | 3 | 7/7 | 2/40 | 23 | 14 |
| 24 | | 14/7 | 42/37 | 24 | 11 |
| 25 | | 22/7 | 19/33 | 25 | 8 |
| 26 | | 29/7 | 52/29 | 26 | 4 |
| 27 | | 37/7 | 21/26 | 27 | 0 |
| 28 | | 44/7 | 47/21 | 28 | 55 |
| 29 | | 52/7 | 8/17 | 29 | 50 |
| 30 | 3 | 59/7 | 26/13 | 29 | 45 |
| 31 | 4 | 6/7 | 38/8 | 30 | 59 |
| 32 | | 13/7 | 46/4 | 31 | 33 |
| 33 | | 20/6 | 50/59 | 32 | 25 |
| 34 | | 27/6 | 49/54 | 33 | 18 |
| 35 | | 34/6 | 43/49 | 34 | 9 |
| 36 | | 41/6 | 32/44 | 35 | 1 |
| 37 | | 48/6 | 16/39 | 35 | 42 |
| 38 | 4 | 54/6 | 55/[illegible] | 36 | 41 |
| 39 | 5 | 1/6 | 29/28 | 37 | 30 |
| 40 | | 7/6 | 57/22 | 38 | 19 |
| 41 | | 14/6 | 19/17 | 39 | 7 |
| 42 | | 20/6 | 36/11 | 39 | 54 |
| 43 | | 26/6 | 47/5 | 40 | 41 |
| 44 | | 32/5 | 52/59 | 41 | 27 |
| 45 | | 38/5 | 51/43 | 42 | 12 |
| 46 | | 44/5 | 44/47 | 42 | 56 |
| 47 | | 50/5 | 31/40 | 43 | 39 |
| 48 | 5 | 56/5 | 11/34 | 44 | 22 |
| 49 | 6 | 1/5 | 45/27 | 45 | 4 |
| 50 | | 7/5 | 12/21 | 45 | 45 |
| 51 | | 12/5 | 33/14 | 46 | 25 |
| 52 | | 17/5 | 47/6 | 47 | 4 |
| 53 | | 22/5 | 53/0 | 47 | 44 |
| 54 | | 27/4 | 53/43 | 48 | 22 |
| 55 | | 32/4 | 46/46 | [illegible] | 58 |
| 56 | | 37/4 | 32/38 | 49 | 34 |
| 57 | | 42/4 | 10/31 | 50 | 9 |
| 58 | | 46/4 | 41/28 | 50 | 44 |
| 59 | | 51/4 | 5/16 | 51 | 17 |
| 60 | 6 | 55/4 | 21/9 | 51 | 49 |
| 61 | 6 | 59/4 | 30/1 | 52 | 20 |
| 62 | 7 | 3/3 | 31/53 | 52 | 50 |
| 63 | | 7/3 | 24/45 | 53 | 20 |
| 64 | | 11/3 | 9/37 | 53 | 48 |
| 65 | | 14/3 | 46/30 | 54 | 17 |
| 66 | | 18/3 | 16/21 | 54 | 42 |
| 67 | | 21/3 | 37/13 | 55 | 8 |
| 68 | | 24/3 | 50/6 | 55 | 33 |
| 69 | 7 | 27/3 | 56/57 | 55 | 56 |
| 70 | | 30/2 | 53/48 | 56 | 17 |
| 71 | | 33/2 | 41/41 | 56 | 40 |
| 72 | | 36/2 | 22/32 | 57 | 0 |
| 73 | | 38/2 | 54/23 | 57 | 19 |
| 74 | | 41/2 | 17/15 | 57 | 38 |
| 75 | | 43/2 | 32/7 | 57 | 55 |
| 76 | | 45/1 | 39/48 | 58 | 10 |
| 77 | | 47/1 | 37/49 | 58 | 26 |
| 78 | | 49/1 | 26/41 | 58 | 40 |
| 79 | | 51/1 | 7/32 | 58 | 52 |
| 80 | | 52/1 | 39/24 | 59 | 4 |
| 81 | | 54/1 | 3/15 | 59 | 15 |
| 82 | | 55/1 | 18/6 | 59 | 24 |
| 83 | | 56/0 | 24/57 | 59 | 32 |
| 84 | | 57/0 | 21/49 | 59 | 40 |
| 85 | | 58/0 | 10/39 | 59 | 45 |
| 86 | | 58/0 | 49/31 | 59 | 51 |
| 87 | | 59/0 | 20/22 | 59 | 55 |
| 88 | 7 | 59/0 | 42/13 | 59 | 58 |
| 89 | 7 | 59/0 | 55/5 | 60. | 0 |
| 90 | 8 | 0/0 | 0/0 | 60 | 0 |

9

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | m | 2 | m | 2 |
| 1 | 0 | 9 / 9 | 33 / 13 | 1 | 2 |
| 2 | | 18 / 9 | 46 / 23 | 2 | 4 |
| 3 | | 28 / 9 | 9 / 22 | 3 | 6 |
| 4 | | 37 / 9 | 31 / 21 | 4 | 8 |
| 5 | | 46 / 9 | 52 / 21 | 5 | 10 |
| 6 | 0 | 56 / 9 | 13 / 20 | 6 | 11 |
| 7 | 1 | 5 / 9 | 33 / 18 | 7 | 13 |
| 8 | | 14 / 9 | 51 / 17 | 8 | 14 |
| 9 | | 24 / 9 | 8 / 16 | 9 | 16 |
| 10 | | 33 / 9 | 24 / 14 | 10 | 17 |
| 11 | | 42 / 9 | 38 / 12 | 11 | 18 |
| 12 | 1 | 51 / 9 | 50 / 10 | 12 | 19 |
| 13 | 2 | 1 / 9 | 0 / 8 | 13 | 19 |
| 14 | | 10 / 9 | 8 / 6 | 14 | 20 |
| 15 | | 19 / 9 | 14 / 3 | 15 | 19 |
| 16 | | 28 / 9 | 17 / 0 | 16 | 19 |
| 17 | | 37 / 8 | 17 / 58 | 17 | 20 |
| 18 | | 46 / 8 | 15 / 55 | 18 | 19 |
| 19 | 2 | 55 / 8 | 10 / 51 | 19 | 17 |
| 20 | 3 | 4 / 8 | 1 / 49 | 20 | 17 |
| 21 | | 12 / 8 | 50 / 44 | 21 | 14 |
| 22 | | 21 / 8 | 34 / 42 | 22 | 13 |
| 23 | | 30 / 8 | 16 / 37 | 23 | 10 |
| 24 | | 38 / 8 | 53 / 34 | 24 | 7 |
| 25 | | 47 / 8 | 27 / 29 | 25 | 4 |
| 26 | 3 | 55 / 8 | 56 / 25 | 26 | 1 |
| 27 | 4 | 4 / 8 | 21 / 21 | 26 | 51 |
| 28 | | 12 / 8 | 42 / 16 | 27 | 52 |
| 29 | | 20 / 8 | 58 / 12 | 28 | 47 |
| 30 | | 29 / 8 | 10 / 7 | 29 | 41 |
| 31 | 4 | 37 / 8 | 17 / 2 | 30 | 35 |
| 32 | | 45 / 7 | 19 / 56 | 31 | 28 |
| 33 | 4 | 53 / 7 | 15 / 52 | 32 | 22 |
| 34 | 5 | 1 / 7 | 7 / 45 | 33 | 13 |
| 35 | | 8 / 7 | 52 / 41 | 34 | 6 |
| 36 | | 16 / 7 | 33 / 35 | 34 | 57 |
| 37 | | 24 / 7 | 8 / 28 | 35 | 47 |
| 38 | | 31 / 7 | 36 / 22 | 36 | 38 |
| 39 | | 38 / 7 | 58 / 17 | 37 | 27 |
| 40 | | 46 / 7 | 16 / 10 | 38 | 15 |
| 41 | 5 | 53 / 7 | 26 / 8 | 39 | 3 |
| 42 | 6 | 0 / 6 | 30 / 58 | 39 | 51 |
| 43 | | 7 / 6 | 28 / 51 | 40 | 37 |
| 44 | | 14 / 6 | 19 / 44 | 41 | 27 |
| 45 | | 21 / 6 | 3 / 37 | 42 | 8 |
| 46 | | 27 / 6 | 40 / 30 | 42 | 52 |
| 47 | | 34 / 6 | 10 / 23 | 43 | 36 |
| 48 | | 40 / 6 | 33 / 16 | 44 | 19 |
| 49 | | 46 / 6 | 49 / 8 | 45 | 1 |
| 50 | | 52 / 6 | 57 / 1 | 45 | 42 |
| 51 | 6 | 58 / 5 | 58 / 53 | 46 | 22 |
| 52 | 7 | 4 / 5 | 51 / 46 | 47 | 2 |
| 53 | | 10 / 5 | 37 / 38 | 47 | 48 |
| 54 | | 16 / 5 | 15 / 29 | 48 | 18 |
| 55 | | 21 / 5 | 44 / 22 | 48 | 55 |
| 56 | | 27 / 5 | 6 / 13 | 49 | 31 |
| 57 | | 32 / 5 | 19 / 6 | 50 | 7 |
| 58 | | 37 / 4 | 25 / 57 | 50 | 41 |
| 59 | | 42 / 4 | 22 / 48 | 51 | 14 |
| 60 | | 47 / 4 | 10 / 40 | 51 | 46 |
| 61 | 7 | 51 / 4 | 50 / 31 | 52 | 18 |
| 62 | 7 | 56 / 4 | 21 / 23 | 52 | 49 |
| 63 | 8 | 0 / 4 | 44 / 13 | 53 | 18 |
| 64 | 8 | 4 / 4 | 57 / 6 | 53 | 47 |
| 65 | | 9 / 3 | 3 / 45 | 54 | 14 |
| 66 | | 12 / 3 | 48 / 37 | 54 | 41 |
| 67 | | 16 / 3 | 25 / 38 | 55 | 7 |
| 68 | | 20 / 3 | 23 / 29 | 55 | 31 |
| 69 | | 23 / 3 | 52 / 18 | 55 | 54 |
| 70 | | 27 / 3 | 10 / 11 | 56 | 18 |
| 71 | | 30 / 3 | 21 / 1 | 56 | 39 |
| 72 | | 33 / 2 | 22 / 51 | 56 | 59 |
| 73 | | 36 / 2 | 13 / 42 | 57 | 19 |
| 74 | | 38 / 2 | 55 / 32 | 57 | 37 |
| 75 | | 41 / 2 | 27 / 22 | 57 | 54 |
| 76 | | 43 / 2 | 49 / 14 | 58 | 11 |
| 77 | | 46 / 2 | 3 / 3 | 58 | 25 |
| 78 | | 48 / 1 | 6 / 53 | 58 | 39 |
| 79 | | 49 / 1 | 59 / 44 | 58 | 52 |
| 80 | | 51 / 1 | 43 / 35 | 59 | 4 |
| 81 | | 53 / 1 | 18 / 24 | 59 | 14 |
| 82 | | 54 / 1 | 42 / 14 | 59 | 24 |
| 83 | | 55 / 1 | 56 / 5 | 59 | 33 |
| 84 | | 57 / 0 | 1 / 54 | 59 | 39 |
| 85 | | 57 / 0 | 55 / 25 | 59 | 46 |
| 86 | | 58 / 0 | 20 / 54 | 59 | 51 |
| 87 | | 59 / 0 | 14 / 24 | 59 | 55 |
| 88 | 8 | 59 / 0 | 38 / 17 | 59 | 57 |
| 89 | 8 | 59 / 0 | 55 / 5 | 59 | 59 |
| 90 | 9 | 0 / 0 | 0 / 0 | 60 | 0 |

| | Arcus | diei | | | | | Arcus | diei | | | | | Arcus | diei | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | m̃ | 2̃ | M | S | | S | m̃ | 2̃ | | | | S | m̃ | 2̃ | M | S |
| 1 | 0 | 10/10 | 25/29 | 1 | 2 | 31 | 5 | 7/8 | 42/45 | 30 | 31 | 61 | 8 | 44/5 | 8/2 | 42 | 16 |
| 2 | | 20/10 | 40/25 | 2 | 4 | 32 | | 16/8 | 45/40 | 31 | 25 | 62 | | 49/4 | 10/52 | 42 | 46 |
| 3 | | 31/10 | 15/24 | 3 | 5 | 33 | | 25/8 | 37/43 | 32 | 17 | 63 | | 54/4 | 2/42 | 43 | 16 |
| 4 | | 41/10 | 39/33 | 4 | 7 | 34 | | 34/8 | 30/38 | 33 | 10 | 64 | 8 | 58/4 | 44/33 | 43 | 45 |
| 5 | 0 | 52/10 | 2/22 | 5 | 8 | 35 | | 42/8 | 48/32 | 34 | 1 | 65 | 9 | 3/4 | 17/22 | 44 | 13 |
| 6 | 1 | 2/10 | 29/22 | 6 | 10 | 36 | | 51/8 | 30/25 | 34 | 52 | 66 | | 7/4 | 39/13 | 44 | 40 |
| 7 | | 12/10 | 46/19 | 7 | 11 | 37 | 5 | 59/8 | 55/19 | 35 | 43 | 67 | | 11/4 | 52/2 | 45 | 5 |
| 8 | | 23/10 | 5/19 | 8 | 13 | 38 | 6 | 8/8 | 14/12 | 36 | 33 | 68 | | 15/3 | 54/52 | 45 | 30 |
| 9 | | 33/10 | 24/17 | 9 | 14 | 39 | | 16/8 | 26/5 | 37 | 22 | 69 | 9 | 19/3 | 46/42 | 45 | 54 |
| 10 | | 43/10 | 41/15 | 10 | 15 | 40 | | 24/7 | 31/58 | 38 | 11 | 70 | 9 | 23/3 | 28/32 | 46 | 16 |
| 11 | 1 | 53/10 | 56/13 | 11 | 15 | 41 | | 32/7 | 29/52 | 38 | 59 | 71 | | 27/3 | 0/21 | 46 | 37 |
| 12 | 2 | 4/10 | 9/10 | 12 | 16 | 42 | | 40/7 | 21/44 | 39 | 46 | 72 | | 30/3 | 21/11 | 46 | 58 |
| 13 | | 14/10 | 19/9 | 13 | 17 | 43 | | 48/7 | 5/37 | 40 | 33 | 73 | | 33/3 | 32/0 | 47 | 17 |
| 14 | | 24/10 | 28/5 | 14 | 17 | 44 | 6 | 55/7 | 42/29 | 41 | 18 | 74 | | 36/2 | 32/49 | 47 | 36 |
| 15 | | 34/10 | 33/3 | 15 | 18 | 45 | 7 | 3/7 | 11/21 | 42 | 4 | 75 | | 39/2 | 21/39 | 47 | 54 |
| 16 | | 44/10 | 36/1 | 16 | 17 | 46 | | 10/7 | 32/14 | 42 | 49 | 76 | | 42/2 | 0/28 | 48 | 10 |
| 17 | 2 | 54/9 | 37/57 | 17 | 16 | 47 | | 17/7 | 46/6 | 43 | 32 | 77 | | 44/2 | 28/17 | 48 | 24 |
| 18 | 3 | 4/9 | 34/53 | 18 | 15 | 48 | | 24/6 | 52/58 | 44 | 15 | 78 | | 46/2 | 44/6 | 48 | 39 |
| 19 | | 14/9 | 27/51 | 19 | 15 | 49 | | 31/6 | 50/49 | 44 | 40 | 79 | | 48/1 | 51/56 | 48 | 52 |
| 20 | | 24/9 | 18/47 | 20 | 13 | 50 | | 38/6 | 39/41 | 45 | 39 | 80 | | 50/1 | 47/45 | 49 | 3 |
| 21 | | 34/9 | 4/43 | 21 | 11 | 51 | | 45/6 | 20/33 | 46 | 19 | 81 | | 52/1 | 33/34 | 49 | 14 |
| 22 | | 43/9 | 47/39 | 22 | 9 | 52 | | 51/6 | 53/23 | 46 | 59 | 82 | | 54/1 | 6/23 | 49 | 23 |
| 23 | 3 | 53/9 | 26/34 | 23 | 6 | 53 | 7 | 58/6 | 17/16 | 47 | 37 | 83 | | 55/1 | 29/11 | 49 | 32 |
| 24 | 4 | 3/9 | 0/31 | 24 | 4 | 54 | 8 | 4/6 | 33/6 | 48 | 15 | 84 | | 56/1 | 40/1 | 49 | 40 |
| 25 | | 12/9 | 31/26 | 25 | 0 | 55 | | 10/5 | 39/58 | 48 | 53 | 85 | | 57/0 | 41/50 | 49 | 46 |
| 26 | | 21/9 | 57/21 | 25 | 56 | 56 | | 16/5 | 37/49 | 49 | 29 | 86 | | 58/0 | 31/39 | 49 | 51 |
| 27 | | 31/9 | 18/16 | 26 | 52 | 57 | | 22/5 | 26/40 | 50 | 4 | 87 | | 59/0 | 10/27 | 49 | 55 |
| 28 | | 40/9 | 34/11 | 27 | 48 | 58 | | 28/5 | 6/30 | 50 | 38 | 88 | 9 | 59/0 | 37/17 | 49 | 58 |
| 29 | | 49/9 | 45/6 | 28 | 43 | 59 | | 33/5 | 36/20 | 51 | 11 | 89 | 9 | 59/0 | 54/6 | 49 | 59 |
| 30 | 4 | 58/9 | 51/1 | 29 | 38 | 60 | | 38/5 | 56/12 | 51 | 45 | 90 | 10 | 0/0 | 0/0 | 60 | 0 |

11

| Arcus | Decl. G | M | 2 | m | s |
|---|---|---|---|---|---|
| 1 | 0 | 11<br>11 | 27<br>27 | 1 | 1 |
| 2 | | 23<br>11 | 54<br>26 | 2 | 3 |
| 3 | | 34<br>11 | 20<br>26 | 3 | 5 |
| 4 | | 45<br>11 | 46<br>29 | 4 | 6 |
| 5 | 0 | 57<br>11 | 10<br>29 | 5 | 8 |
| 6 | 1 | 8<br>11 | 34<br>33 | 6 | 9 |
| 7 | | 19<br>11 | 57<br>21 | 7 | 10 |
| 8 | | 31<br>11 | 18<br>20 | 8 | 11 |
| 9 | | 42<br>11 | 38<br>18 | 9 | 12 |
| 10 | 1 | 53<br>11 | 56<br>14 | 10 | 13 |
| 11 | 2 | 5<br>11 | 11<br>14 | 11 | 14 |
| 12 | | 16<br>11 | 25<br>11 | 12 | 14 |
| 13 | | 27<br>11 | 36<br>9 | 13 | 15 |
| 14 | | 38<br>11 | 45<br>6 | 14 | 14 |
| 15 | 2 | 49<br>11 | 51<br>2 | 15 | 14 |
| 16 | 3 | 0<br>11 | 53<br>0 | 16 | 14 |
| 17 | | 11<br>10 | 53<br>56 | 17 | 13 |
| 18 | | 22<br>10 | 49<br>53 | 18 | 12 |
| 19 | | 33<br>10 | 42<br>49 | 19 | 11 |
| 20 | | 44<br>10 | 31<br>44 | 20 | 9 |
| 21 | 3 | 55<br>10 | 15<br>41 | 21 | 8 |
| 22 | 4 | 5<br>10 | 56<br>36 | 22 | 5 |
| 23 | 4 | 16<br>10 | 32<br>32 | 23 | 3 |
| 24 | | 27<br>10 | 4<br>27 | 24 | 0 |
| 25 | | 37<br>10 | 31<br>22 | 24 | 56 |
| 26 | | 47<br>10 | 53<br>17 | 25 | 53 |
| 27 | 4 | 58<br>10 | 10<br>12 | 26 | 48 |
| 28 | 5 | 8<br>10 | 22<br>6 | 27 | 43 |
| 29 | | 18<br>10 | 28<br>1 | 28 | 38 |
| 30 | 5 | 28<br>9 | 39<br>54 | 29 | 33 |
| 31 | | 38<br>9 | 23<br>49 | 30 | 27 |
| 32 | | 48<br>9 | 12<br>42 | 31 | 20 |
| 33 | 5 | 57<br>9 | 54<br>36 | 32 | 13 |
| 34 | 6 | 7<br>9 | 30<br>29 | 33 | 5 |
| 35 | | 16<br>9 | 49<br>23 | 33 | 57 |
| 36 | | 26<br>9 | 22<br>16 | 34 | 48 |
| 37 | | 35<br>9 | 38<br>9 | 35 | 39 |
| 38 | | 44<br>9 | 47<br>1 | 36 | 28 |
| 39 | 6 | 53<br>8 | 48<br>54 | 37 | 18 |
| 40 | 7 | 2<br>8 | 42<br>46 | 38 | 6 |
| 41 | | 11<br>8 | 28<br>39 | 38 | 55 |
| 42 | | 20<br>8 | 7<br>31 | 39 | 42 |
| 43 | | 28<br>8 | 38<br>22 | 40 | 28 |
| 44 | | 37<br>8 | 0<br>14 | 41 | 14 |
| 45 | | 46<br>8 | 14<br>6 | 41 | 53 |
| 46 | | 56<br>7 | 51<br>57 | 42 | 44 |
| 47 | 7 | 1<br>7 | 18<br>49 | 43 | 28 |
| 48 | 8 | 9<br>7 | 7<br>39 | 44 | 11 |
| 49 | | 16<br>7 | 46<br>35 | 44 | 54 |
| 50 | | 24<br>7 | 18<br>31 | 45 | 35 |
| 51 | | 31<br>7 | 39<br>23 | 46 | 14 |
| 52 | | 38<br>7 | 42<br>2 | 46 | 54 |
| 53 | | 44<br>6 | 44<br>54 | 47 | 34 |
| 54 | | 52<br>6 | 48<br>44 | 48 | 12 |
| 55 | 8 | 59<br>6 | 33<br>34 | 48 | 49 |
| 56 | 9 | 6<br>6 | 6<br>24 | 49 | 25 |
| 57 | | 12<br>6 | 30<br>14 | 50 | 1 |
| 58 | | 18<br>6 | 44<br>3 | 50 | 35 |
| 59 | | 24<br>5 | 41<br>54 | 51 | 9 |
| 60 | | 30<br>5 | 41<br>42 | 51 | 42 |
| 61 | | 26<br>5 | 24<br>32 | 52 | 13 |
| 62 | | 41<br>5 | 56<br>22 | 52 | 41 |
| 63 | | 47<br>5 | 18<br>11 | 53 | 14 |
| 64 | | 52<br>5 | 29<br>1 | 53 | 43 |
| 65 | 9 | 57<br>4 | 30<br>49 | 54 | 10 |
| 66 | 10 | 2<br>4 | 19<br>38 | 54 | 37 |
| 67 | 10 | 6<br>4 | 57<br>27 | 55 | 4 |
| 68 | | 11<br>4 | 24<br>16 | 55 | 28 |
| 69 | | 14<br>4 | 40<br>4 | 55 | 52 |
| 70 | | 19<br>3 | 44<br>53 | 56 | 12 |
| 71 | | 23<br>3 | 37<br>42 | 56 | 33 |
| 72 | | 27<br>3 | 19<br>30 | 56 | 57 |
| 73 | | 30<br>3 | 49<br>19 | 57 | 17 |
| 74 | | 34<br>3 | 8<br>7 | 57 | 34 |
| 75 | | 37<br>2 | 14<br>51 | 57 | 52 |
| 76 | | 40<br>2 | 10<br>42 | 58 | 8 |
| 77 | | 42<br>2 | 52<br>32 | 58 | 25 |
| 78 | | 44<br>2 | 24<br>19 | 58 | 38 |
| 79 | | 47<br>2 | 43<br>7 | 58 | 52 |
| 80 | | 49<br>1 | 50<br>56 | 59 | 5 |
| 81 | | 51<br>1 | 46<br>42 | 59 | 14 |
| 82 | | 53<br>1 | 39<br>32 | 59 | 25 |
| 83 | | 55<br>1 | 1<br>19 | 59 | 33 |
| 84 | | 56<br>1 | 20<br>7 | 59 | 40 |
| 85 | | 57<br>0 | 27<br>55 | 59 | 47 |
| 86 | | 58<br>0 | 22<br>43 | 59 | 51 |
| 87 | | 59<br>0 | 5<br>30 | 59 | 55 |
| 88 | 10 | 59<br>0 | 34<br>18 | 59 | 59 |
| 89 | 10 | 59<br>0 | 53<br>7 | 60 | 0 |
| 90 | 11 | 0<br>0 | 0<br>0 | 60 | 0 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | m | s | m | s |
| 1 | 0 | 12<br>12 | 28<br>29 | 1 | 2 |
| 2 | | 34<br>12 | 47<br>28 | 2 | 3 |
| 3 | | 37<br>12 | 25<br>27 | 3 | 3 |
| 4 | 0 | 49<br>12 | 42<br>26 | 4 | 5 |
| 5 | 1 | 12<br>12 | 18<br>25 | 5 | 6 |
| 6 | 1 | 14<br>12 | 43<br>24 | 6 | 8 |
| 7 | | 27<br>12 | 7<br>22 | 7 | 9 |
| 8 | | 39<br>12 | 29<br>21 | 8 | 10 |
| 9 | 1 | 51<br>12 | 50<br>19 | 9 | 10 |
| 10 | 2 | 4<br>12 | 9<br>16 | 10 | 10 |
| 11 | | 16<br>12 | 25<br>14 | 11 | 11 |
| 12 | | 28<br>12 | 39<br>12 | 12 | 12 |
| 13 | | 40<br>12 | 51<br>8 | 13 | 11 |
| 14 | 2 | 52<br>12 | 59<br>6 | 14 | 12 |
| 15 | 3 | 5<br>12 | 9<br>2 | 15 | 11 |
| 16 | | 17<br>11 | 7<br>59 | 16 | 11 |
| 17 | | 29<br>11 | 6<br>54 | 17 | 10 |
| 18 | | 41<br>11 | 1<br>52 | 18 | 9 |
| 19 | 3. | 52<br>11 | 53<br>47 | 19 | 7 |
| 20 | 4 | 4<br>11 | 40<br>43 | 20 | 5 |
| 21 | | 16<br>11 | 23<br>38 | 21 | 3 |
| 22 | | 28<br>11 | 1<br>34 | 22 | 1 |
| 23 | | 39<br>11 | 35<br>29 | 22 | 58 |
| 24 | 4 | 51<br>11 | 4<br>23 | 23 | 54 |
| 25 | 5 | 2<br>11 | 27<br>19 | 24 | 52 |
| 26 | | 13<br>11 | 46<br>12 | 25 | 41 |
| 27 | | 24<br>11 | 58<br>7 | 26 | 44 |
| 28 | | 36<br>11 | 5<br>1 | 27 | 39 |
| 29 | | 47<br>10 | 6<br>55 | 28 | 34 |
| 30 | 5 | 58<br>10 | 1<br>49 | 29 | 28 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | m | s | m | s |
| 31 | 6 | 8<br>10 | 50<br>42 | 30 | 21 |
| 32 | | 19<br>10 | 32<br>35 | 31 | 14 |
| 33 | | 30<br>10 | 7<br>28 | 32 | 8 |
| 34 | | 40<br>10 | 35<br>21 | 33 | 0 |
| 35 | | 50<br>10 | 50<br>15 | 33 | 52 |
| 36 | 7 | 1<br>10 | 10<br>7 | 34 | 43 |
| 37 | 7 | 11<br>9 | 17<br>58 | 35 | 33 |
| 38 | | 21<br>9 | 14<br>51 | 36 | 23 |
| 39 | | 31<br>9 | 6<br>42 | 37 | 12 |
| 40 | | 40<br>9 | 48<br>35 | 38 | 2 |
| 41 | | 50<br>9 | 23<br>26 | 38 | 49 |
| 42 | 7 | 59<br>9 | 49<br>17 | 39 | 37 |
| 43 | 8 | 9<br>9 | 6<br>9 | 40 | 24 |
| 44 | | 18<br>8 | 15<br>59 | 41 | 9 |
| 45 | | 27<br>8 | 14<br>51 | 41 | 54 |
| 46 | | 36<br>8 | 5<br>40 | 42 | 39 |
| 47 | | 44<br>8 | 46<br>32 | 43 | 23 |
| 48 | 8 | 53<br>8 | 18<br>22 | 44 | 6 |
| 49 | 9 | 1<br>8 | 40<br>12 | 44 | 48 |
| 50 | | 9<br>8 | 52<br>2 | 45 | 30 |
| 51 | | 17<br>7 | 54<br>52 | 46 | 11 |
| 52 | | 25<br>7 | 46<br>42 | 46 | 51 |
| 53 | | 33<br>7 | 38<br>32 | 47 | 30 |
| 54 | | 41<br>7 | 0<br>21 | 48 | 8 |
| 55 | | 48<br>7 | 21<br>11 | 48 | 46 |
| 56 | 9 | 55<br>7 | 31<br>0 | 49 | 22 |
| 57 | 10 | 2<br>6 | 31<br>48 | 49 | 57 |
| 58 | | 9<br>6 | 19<br>37 | 50 | 32 |
| 59 | | 15<br>6 | 56<br>27 | 51 | 7 |
| 60 | | 22<br>6 | 23<br>12 | 51 | 39 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | m | s | m | s |
| 61 | | 28<br>6 | 37<br>4 | 52 | 11 |
| 62 | | 34<br>5 | 41<br>51 | 52 | 41 |
| 63 | | 40<br>5 | 33<br>40 | 53 | 11 |
| 64 | | 46<br>5 | 12<br>28 | 53 | 41 |
| 65 | | 51<br>5 | 40<br>16 | 54 | 10 |
| 66 | 10 | 56<br>5 | 56<br>5 | 54 | 36 |
| 67 | 11 | 2<br>4 | 1<br>51 | 55 | 1 |
| 68 | 11 | 6<br>4 | 52<br>40 | 55 | 23 |
| 69 | | 11<br>4 | 32<br>26 | 55 | 51 |
| 70 | | 14<br>4 | 58<br>16 | 56 | 14 |
| 71 | | 20<br>4 | 54<br>2 | 56 | 36 |
| 72 | | 24<br>3 | 16<br>50 | 56 | 57 |
| 73 | | 28<br>3 | 6<br>36 | 57 | 16 |
| 74 | | 31<br>3 | 43<br>24 | 57 | 34 |
| 75 | | 34<br>3 | 7<br>11 | 57 | 43 |
| 76 | | 38<br>2 | 18<br>59 | 58 | 9 |
| 77 | | 41<br>2 | 17<br>44 | 58 | 24 |
| 78 | | 44<br>2 | 2<br>33 | 58 | 39 |
| 79 | | 46<br>2 | 54<br>20 | 58 | 51 |
| 80 | | 48<br>2 | 44<br>5 | 59 | 3 |
| 81 | | 51<br>1 | 0<br>54 | 59 | 14 |
| 82 | | 52<br>1 | 54<br>40 | 59 | 23 |
| 83 | | 54<br>1 | 34<br>26 | 59 | 31 |
| 84 | | 56<br>1 | 0<br>14 | 59 | 40 |
| 85 | | 57<br>0 | 14<br>59 | 59 | 46 |
| 86 | | 58<br>0 | 13<br>47 | 59 | 51 |
| 87 | | 59<br>0 | 0<br>34 | 59 | 55 |
| 88 | 11 | 59<br>0 | 34<br>20 | 59 | 57 |
| 89 | 11 | 59<br>0 | 54<br>6 | 59 | 59 |
| 90 | 12 | 0<br>0 | 0<br>0 | 60 | 0 |

13

| Arcus | Dra | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 1 | 0 | 13 / 13 | 30 / 30 | 1 | 1 |
| 2 | | 27 / 13 | 0 / 28 | 2 | 2 |
| 3 | | 40 / 13 | 28 / 29 | 3 | 4 |
| 4 | 0 | 43 / 13 | 47 / 27 | 4 | 4 |
| 5 | 1 | 7 / 13 | 24 / 27 | 5 | 5 |
| 6 | | 20 / 13 | 41 / 25 | 6 | 6 |
| 7 | | 34 / 13 | 16 / 23 | 7 | 6 |
| 8 | 1 | 47 / 13 | 39 / 21 | 8 | 7 |
| 9 | 2 | 1 / 13 | 0 / 19 | 9 | 8 |
| 10 | | 14 / 13 | 39 / 17 | 10 | 9 |
| 11 | | 27 / 13 | 36 / 14 | 11 | 9 |
| 12 | | 40 / 13 | 41 / 11 | 12 | 8 |
| 13 | 2 | 54 / 13 | 2 / 9 | 13 | 9 |
| 14 | 3 | 7 / 13 | 11 / 5 | 14 | 8 |
| 15 | | 20 / 13 | 16 / 2 | 15 | 8 |
| 16 | | 33 / 12 | 18 / 58 | 16 | 6 |
| 17 | | 46 / 12 | 16 / 54 | 17 | 5 |
| 18 | 3 | 59 / 12 | 10 / 50 | 18 | 4 |
| 19 | 4 | 12 / 12 | 0 / 45 | 19 | 3 |
| 20 | | 24 / 12 | 44 / 41 | 20 | 1 |
| 21 | | 37 / 12 | 26 / 36 | 20 | 59 |
| 22 | 4 | 50 / 12 | 2 / 31 | 21 | 56 |
| 23 | 4 | 2 / 12 | 33 / 26 | 22 | 54 |
| 24 | 5 | 14 / 12 | 49 / 20 | 23 | 50 |
| 25 | | 27 / 12 | 19 / 14 | 24 | 47 |
| 26 | | 39 / 12 | 33 / 9 | 25 | 43 |
| 27 | 5 | 51 / 12 | 43 / 2 | 26 | 38 |
| 28 | 6 | 3 / 11 | 44 / 56 | 27 | 33 |
| 29 | | 15 / 11 | 40 / 49 | 28 | 28 |
| 30 | | 27 / 11 | 29 / 42 | 29 | 22 |

| Arcus | Dra | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 31 | 6 | 39 / 11 | 11 / 34 | 30 | 16 |
| 32 | 6 | 50 / 11 | 46 / 29 | 31 | 10 |
| 33 | 7 | 2 / 11 | 15 / 24 | 32 | 2 |
| 34 | | 13 / 11 | 35 / 13 | 33 | 44 |
| 35 | | 24 / 11 | 48 / 4 | 33 | 46 |
| 36 | | 35 / 10 | 53 / 57 | 34 | 37 |
| 37 | | 46 / 10 | 50 / 48 | 35 | 27 |
| 38 | 7 | 57 / 10 | 38 / 40 | 36 | 18 |
| 39 | 8 | 8 / 10 | 18 / 32 | 37 | 7 |
| 40 | | 18 / 10 | 50 / 22 | 37 | 55 |
| 41 | | 29 / 10 | 12 / 14 | 38 | 44 |
| 42 | | 39 / 10 | 26 / 4 | 39 | 31 |
| 43 | | 49 / 9 | 30 / 54 | 40 | 18 |
| 44 | 8 | 59 / 9 | 24 / 45 | 41 | 4 |
| 45 | 9 | 9 / 9 | 9 / 35 | 41 | 49 |
| 46 | | 18 / 9 | 44 / 25 | 42 | 34 |
| 47 | | 28 / 9 | 9 / 14 | 43 | 18 |
| 48 | | 37 / 9 | 24 / 4 | 44 | 1 |
| 49 | | 46 / 8 | 28 / 54 | 44 | 44 |
| 50 | 9 | 55 / 8 | 22 / 43 | 45 | 25 |
| 51 | 10 | 4 / 8 | 5 / 32 | 46 | 7 |
| 52 | | 12 / 8 | 37 / 21 | 46 | 47 |
| 53 | | 20 / 8 | 58 / 10 | 47 | 26 |
| 54 | | 29 / 7 | 8 / 59 | 48 | 4 |
| 55 | | 37 / 7 | 7 / 48 | 48 | 40 |
| 56 | | 44 / 7 | 53 / 37 | 49 | 18 |
| 57 | | 52 / 7 | 28 / 22 | 49 | 55 |
| 58 | 10 | 59 / 7 | 41 / 12 | 50 | 30 |
| 59 | 11 | 7 / 6 | 3 / 59 | 51 | 2 |
| 60 | | 14 / 6 | 2 / 46 | 51 | 36 |

| Arcus | Dra | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 61 | 11 | 20 / 6 | 48 / 34 | 52 | 9 |
| 62 | | 27 / 6 | 22 / 21 | 52 | 39 |
| 63 | | 33 / 6 | 43 / 10 | 53 | 9 |
| 64 | | 39 / 5 | 53 / 57 | 53 | 38 |
| 65 | | 45 / 5 | 50 / 44 | 54 | 6 |
| 66 | | 51 / 5 | 32 / 30 | 54 | 33 |
| 67 | 11 | 57 / 5 | 2 / 17 | 55 | 0 |
| 68 | 12 | 2 / 5 | 19 / 4 | 55 | 25 |
| 69 | | 7 / 4 | 23 / 50 | 55 | 48 |
| 70 | | 12 / 4 | 13 / 37 | 56 | 11 |
| 71 | | 16 / 4 | 50 / 23 | 56 | 33 |
| 72 | | 21 / 4 | 13 / 9 | 56 | 54 |
| 73 | | 25 / 3 | 22 / 55 | 57 | 14 |
| 74 | | 29 / 3 | 16 / 44 | 57 | 34 |
| 75 | | 33 / 3 | 0 / 27 | 57 | 50 |
| 76 | | 36 / 3 | 27 / 14 | 58 | 7 |
| 77 | | 39 / 3 | 41 / 0 | 58 | 22 |
| 78 | | 42 / 2 | 41 / 44 | 58 | 36 |
| 79 | | 45 / 2 | 56 / 32 | 58 | 50 |
| 80 | | 47 / 2 | 58 / 16 | 59 | 1 |
| 81 | | 50 / 2 | 19 / 3 | 59 | 13 |
| 82 | | 52 / 1 | 17 / 48 | 59 | 23 |
| 83 | | 54 / 1 | 5 / 34 | 59 | 32 |
| 84 | | 55 / 1 | 40 / 20 | 59 | 38 |
| 85 | | 57 / 1 | 0 / 4 | 59 | 45 |
| 86 | | 58 / 0 | 4 / 51 | 59 | 51 |
| 87 | | 58 / 0 | 44 / 36 | 59 | 55 |
| 88 | | 59 / 0 | 31 / 22 | 59 | 58 |
| 89 | 12 | 59 / 0 | 53 / 7 | 60 | 0 |
| 90 | 13 | 0 / 0 | 0 / 0 | 60 | 0 |

| | Arcus G | M | 2a | Dcl M | S |
|---|---|---|---|---|---|
| 1 | 0 | 14 / 14 | 31 / 31 | 1 | 1 |
| 2 | | 29 / 14 | 2 / 30 | 2 | 1 |
| 3 | | 42 / 14 | 32 / 29 | 3 | 2 |
| 4 | 0 | 58 / 14 | 1 / 28 | 4 | 3 |
| 5 | 1 | 12 / 14 | 29 / 28 | 5 | 4 |
| 6 | | 26 / 14 | 57 / 25 | 6 | 4 |
| 7 | | 41 / 14 | 22 / 24 | 7 | 5 |
| 8 | 1 | 55 / 14 | 46 / 22 | 8 | 6 |
| 9 | 2 | 10 / 14 | 8 / 20 | 9 | 6 |
| 10 | | 24 / 14 | 38 / 17 | 10 | 5 |
| 11 | | 38 / 14 | 44 / 14 | 11 | 6 |
| 12 | 2 | 52 / 14 | 49 / 12 | 12 | 6 |
| 13 | 3 | 7 / 14 | 11 / 8 | 13 | 5 |
| 14 | | 21 / 14 | 19 / 5 | 14 | 5 |
| 15 | | 35 / 14 | 24 / 0 | 15 | 3 |
| 16 | 3 | 49 / 13 | 24 / 57 | 16 | 3 |
| 17 | 4 | 3 / 13 | 21 / 53 | 17 | 2 |
| 18 | | 17 / 13 | 14 / 49 | 18 | 1 |
| 19 | | 31 / 13 | 3 / 43 | 18 | 58 |
| 20 | | 44 / 13 | 46 / 37 | 19 | 57 |
| 21 | 4 | 58 / 13 | 24 / 33 | 20 | 54 |
| 22 | 5 | 11 / 13 | 48 / 29 | 21 | 52 |
| 23 | | 24 / 13 | 21 / 22 | 22 | 48 |
| 24 | | 38 / 13 | 49 / 17 | 23 | 49 |
| 25 | 5 | 52 / 13 | 6 / 10 | 24 | 41 |
| 26 | 6 | 5 / 13 | 16 / 4 | 25 | 31 |
| 27 | | 18 / 12 | 20 / 57 | 26 | 32 |
| 28 | | 31 / 12 | 17 / 41 | 27 | 28 |
| 29 | | 44 / 12 | 8 / 43 | 28 | 22 |
| 30 | 6 | 56 / 12 | 51 / 36 | 29 | 17 |

| | Arcus G | M | 2a | Dcl M | S |
|---|---|---|---|---|---|
| 31 | 7 | 9 / 12 | 27 / 29 | 30 | 16 |
| 32 | | 21 / 12 | 46 / 21 | 31 | 3 |
| 33 | | 34 / 12 | 17 / 12 | 31 | 46 |
| 34 | | 46 / 12 | 29 / 4 | 32 | 49 |
| 35 | 7 | 58 / 11 | 32 / 56 | 33 | 40 |
| 36 | 8 | 10 / 11 | 30 / 47 | 34 | 31 |
| 37 | | 22 / 11 | 17 / 39 | 35 | 22 |
| 38 | | 33 / 11 | 50 / 29 | 36 | 12 |
| 39 | | 45 / 11 | 25 / 20 | 37 | 2 |
| 40 | 8 | 56 / 11 | 45 / 11 | 37 | 50 |
| 41 | 9 | 7 / 11 | 40 / 1 | 38 | 38 |
| 42 | | 18 / 10 | 47 / 51 | 39 | 24 |
| 43 | | 29 / 10 | 28 / 40 | 40 | 13 |
| 44 | | 40 / 10 | 58 / 30 | 40 | 59 |
| 45 | 9 | 50 / 10 | 48 / 20 | 41 | 44 |
| 46 | 10 | 1 / 10 | 18 / 9 | 42 | 29 |
| 47 | | 11 / 9 | 27 / 58 | 43 | 13 |
| 48 | | 21 / 9 | 24 / 47 | 43 | 56 |
| 49 | | 31 / 9 | 12 / 34 | 44 | 38 |
| 50 | | 40 / 9 | 47 / 24 | 45 | 21 |
| 51 | | 50 / 9 | 12 / 12 | 46 | 1 |
| 52 | 10 | 59 / 9 | 32 / 0 | 46 | 41 |
| 53 | 11 | 8 / 8 | 24 / 48 | 47 | 22 |
| 54 | | 17 / 8 | 12 / 34 | 48 | 0 |
| 55 | | 25 / 8 | 41 / 24 | 48 | 37 |
| 56 | | 34 / 8 | 11 / 12 | 49 | 15 |
| 57 | | 42 / 7 | 33 / 58 | 49 | 49 |
| 58 | | 50 / 7 | 21 / 44 | 50 | 24 |
| 59 | 11 | 58 / 7 | 4 / 33 | 50 | 59 |
| 60 | 12 | 5 / 7 | 38 / 19 | 51 | 31 |

| | Arcus G | M | 2a | Dcl M | S |
|---|---|---|---|---|---|
| 61 | 12 | 12 / 7 | 47 / 4 | 52 | 3 |
| 62 | | 20 / 6 | 1 / 51 | 52 | 36 |
| 63 | | 26 / 6 | 42 / 37 | 53 | 7 |
| 64 | | 33 / 6 | 31 / 24 | 53 | 35 |
| 65 | | 39 / 6 | 46 / 9 | 54 | 3 |
| 66 | | 46 / 5 | 5 / 57 | 54 | 30 |
| 67 | | 52 / 5 | 2 / 42 | 54 | 57 |
| 68 | 12 | 57 / 5 | 44 / 27 | 55 | 22 |
| 69 | 13 | 3 / 5 | 11 / 13 | 55 | 47 |
| 70 | 13 | 8 / 4 | 24 / 59 | 56 | 10 |
| 71 | | 13 / 4 | 23 / 44 | 56 | 32 |
| 72 | | 18 / 4 | 7 / 29 | 56 | 53 |
| 73 | | 22 / 4 | 36 / 14 | 57 | 13 |
| 74 | | 26 / 4 | 40 / 0 | 57 | 32 |
| 75 | | 30 / 3 | 40 / 44 | 57 | 49 |
| 76 | | 34 / 3 | 34 / 29 | 58 | 6 |
| 77 | | 38 / 3 | 3 / 13 | 58 | 22 |
| 78 | | 41 / 2 | 17 / 59 | 58 | 36 |
| 79 | | 44 / 2 | 16 / 43 | 58 | 49 |
| 80 | | 46 / 2 | 59 / 28 | 59 | 2 |
| 81 | | 49 / 2 | 27 / 13 | 59 | 13 |
| 82 | | 51 / 1 | 40 / 57 | 59 | 22 |
| 83 | | 53 / 1 | 37 / 41 | 59 | 31 |
| 84 | | 55 / 1 | 18 / 27 | 59 | 40 |
| 85 | | 56 / 1 | 44 / 10 | 59 | 46 |
| 86 | | 57 / 0 | 45 / 54 | 59 | 51 |
| 87 | | 58 / 0 | 40 / 39 | 59 | 54 |
| 88 | | 59 / 0 | 29 / 26 | 59 | 57 |
| 89 | 13 | 59 / 0 | 43 / 7 | 59 | 59 |
| 90 | 14 | 0 / 0 | 0 / 0 | 60 | 0 |

14

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | ag · | 2 |
| 1 | 0 | 15<br>15 | 32<br>31 | 1 | 0 |
| 2 | 0 | 31<br>15 | 3<br>31 | 2 | 1 |
| 3 | 0 | 46<br>15 | 34<br>30 | 3 | 2 |
| 4 | 1 | 2<br>15 | 4<br>29 | 4 | 2 |
| 5 | 1 | 17<br>15 | 33<br>28 | 5 | 3 |
| 6 | 1 | 33<br>15 | 1<br>26 | 6 | 3 |
| 7 | 1 | 48<br>15 | 27<br>25 | 7 | 3 |
| 8 | 2 | 3<br>15 | 52<br>22 | 8 | 3 |
| 9 | 2 | 19<br>15 | 14<br>19 | 9 | 3 |
| 10 | 2 | 34<br>15 | 33<br>18 | 10 | 3 |
| 11 | 2 | 49<br>15 | 51<br>14 | 11 | 2 |
| 12 | 3 | 5<br>15 | 5<br>11 | 12 | 2 |
| 13 | 3 | 20<br>15 | 16<br>8 | 13 | 2 |
| 14 | 3 | 35<br>15 | 24<br>3 | 14 | 0 |
| 15 | 3 | 50<br>15 | 27<br>0 | 15 | 0 |
| 16 | 4 | 5<br>14 | 27<br>56 | 15 | 59 |
| 17 | 4 | 20<br>14 | 23<br>52 | 16 | 48 |
| 18 | 4 | 35<br>14 | 15<br>46 | 17 | 44 |
| 19 | 4 | 50<br>14 | 1<br>42 | 18 | 54 |
| 20 | 5 | 4<br>14 | 43<br>36 | 19 | 51 |
| 21 | 5 | 19<br>14 | 19<br>31 | 20 | 49 |
| 22 | 5 | 33<br>14 | 50<br>25 | 21 | 46 |
| 23 | 5 | 48<br>14 | 15<br>19 | 22 | 43 |
| 24 | 6 | 2<br>14 | 34<br>13 | 23 | 40 |
| 25 | 6 | 16<br>14 | 47<br>6 | 24 | 35 |
| 26 | 6 | 30<br>13 | 53<br>49 | 25 | 31 |
| 27 | 6 | 44<br>13 | 42<br>42 | 26 | 27 |
| 28 | 6 | 58<br>13 | 44<br>46 | 27 | 22 |
| 29 | 7 | 12<br>13 | 30<br>38 | 28 | 16 |
| 30 | 7 | 26<br>13 | 8<br>29 | 29 | 10 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | ag · | 2 |
| 31 | 7 | 39<br>13 | 37<br>22 | 30 | 4 |
| 32 | 7 | 52<br>13 | 59<br>14 | 30 | 57 |
| 33 | 8 | 6<br>13 | 13<br>5 | 31 | 40 |
| 34 | 8 | 19<br>12 | 18<br>56 | 32 | 41 |
| 35 | 8 | 32<br>12 | 14<br>47 | 33 | 33 |
| 36 | 8 | 44<br>12 | 1<br>38 | 34 | 25 |
| 37 | 8 | 56<br>12 | 39<br>29 | 35 | 15 |
| 38 | 9 | 10<br>12 | 8<br>19 | 36 | 5 |
| 39 | 9 | 22<br>12 | 27<br>8 | 36 | 44 |
| 40 | 9 | 34<br>11 | 35<br>49 | 37 | 44 |
| 41 | 9 | 46<br>11 | 24<br>58 | 38 | 32 |
| 42 | 9 | 58<br>11 | 22<br>38 | 39 | 19 |
| 43 | 10 | 10<br>11 | 0<br>27 | 40 | 4 |
| 44 | 10 | 21<br>11 | 27<br>14 | 40 | 42 |
| 45 | 10 | 32<br>11 | 41<br>4 | 41 | 39 |
| 46 | 10 | 43<br>10 | 45<br>55 | 42 | 33 |
| 47 | 10 | 54<br>10 | 40<br>41 | 43 | 1 |
| 48 | 11 | 5<br>10 | 21<br>29 | 43 | 41 |
| 49 | 11 | 15<br>10 | 50<br>18 | 44 | 34 |
| 50 | 11 | 26<br>10 | 8<br>4 | 45 | 16 |
| 51 | 11 | 36<br>9 | 13<br>52 | 45 | 46 |
| 52 | 11 | 46<br>9 | 5<br>41 | 46 | 37 |
| 53 | 11 | 55<br>9 | 46<br>26 | 47 | 15 |
| 54 | 12 | 5<br>9 | 12<br>12 | 47 | 54 |
| 55 | 12 | 14<br>9 | 24<br>2 | 48 | 34 |
| 56 | 12 | 23<br>8 | 26<br>46 | 49 | 11 |
| 57 | 12 | 32<br>8 | 12<br>33 | 49 | 46 |
| 58 | 12 | 40<br>8 | 45<br>19 | 50 | 21 |
| 59 | 12 | 49<br>8 | 4<br>4 | 50 | 46 |
| 60 | 12 | 57<br>7 | 8<br>52 | 51 | 29 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | ag · | 2 |
| 61 | 13 | 5<br>7 | 0<br>37 | 52 | 1 |
| 62 | 13 | 12<br>7 | 37<br>22 | 52 | 32 |
| 63 | 13 | 19<br>7 | 59<br>7 | 53 | 2 |
| 64 | 13 | 27<br>6 | 6<br>43 | 53 | 32 |
| 65 | 13 | 33<br>6 | 49<br>47 | 54 | 0 |
| 66 | 13 | 40<br>6 | 36<br>23 | 54 | 28 |
| 67 | 13 | 46<br>6 | 59<br>7 | 54 | 54 |
| 68 | 13 | 53<br>5 | 6<br>42 | 55 | 20 |
| 69 | 13 | 58<br>5 | 48<br>36 | 55 | 44 |
| 70 | 14 | 4<br>5 | 34<br>21 | 56 | 8 |
| 71 | 14 | 9<br>5 | 55<br>5 | 56 | 30 |
| 72 | | 15<br>4 | 0<br>49 | 56 | 51 |
| 73 | | 19<br>4 | 49<br>33 | 57 | 11 |
| 74 | | 24<br>4 | 22<br>17 | 57 | 31 |
| 75 | | 28<br>4 | 39<br>1 | 57 | 49 |
| 76 | | 32<br>3 | 40<br>54 | 58 | 5 |
| 77 | | 36<br>3 | 34<br>28 | 58 | 21 |
| 78 | | 39<br>3 | 45<br>12 | 58 | 36 |
| 79 | | 43<br>2 | 5<br>46 | 58 | 50 |
| 80 | | 46<br>2 | 1<br>39 | 59 | 1 |
| 81 | | 48<br>2 | 40<br>22 | 59 | 12 |
| 82 | | 51<br>2 | 2<br>6 | 59 | 23 |
| 83 | | 53<br>1 | 8<br>40 | 59 | 31 |
| 84 | | 54<br>1 | 48<br>32 | 59 | 38 |
| 85 | | 56<br>1 | 20<br>16 | 59 | 44 |
| 86 | | 57<br>0 | 36<br>48 | 59 | 50 |
| 87 | | 58<br>0 | 24<br>22 | 59 | 55 |
| 88 | | 59<br>0 | 26<br>26 | 59 | 58 |
| 89 | 14 | 59<br>0 | 52<br>8 | 59 | 59 |
| 90 | 15 | 0<br>0 | 0<br>0 | 60 | 0 |

| | Ascens dra | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 1 | 0 | 16 / 16 | 32 / 32 | 1 | 1 |
| 2 | 0 | 33 / 16 | 4 / 32 | 2 | 1 |
| 3 | 0 | 49 / 16 | 36 / 30 | 3 | 0 |
| 4 | 1 | 6 / 16 | 6 / 30 | 4 | 1 |
| 5 | 1 | 22 / 16 | 36 / 28 | 5 | 1 |
| 6 | 1 | 39 / 16 | 4 / 26 | 6 | 1 |
| 7 | 1 | 55 / 16 | 30 / 24 | 7 | 1 |
| 8 | 2 | 11 / 16 | 55 / 22 | 8 | 0 |
| 9 | 2 | 28 / 16 | 17 / 19 | 9 | 0 |
| 10 | 2 | 44 / 16 | 36 / 11 | 10 | 1 |
| 11 | 3 | 0 / 16 | 43 / 14 | 11 | 0 |
| 12 | 3 | 17 / 16 | 7 / 11 | 11 | 59 |
| 13 | 3 | 33 / 16 | 18 / 6 | 12 | 58 |
| 14 | 3 | 49 / 16 | 24 / 3 | 13 | 57 |
| 15 | 4 | 5 / 15 | 27 / 59 | 14 | 56 |
| 16 | 4 | 21 / 15 | 26 / 59 | 15 | 55 |
| 17 | 4 | 37 / 15 | 21 / 49 | 16 | 52 |
| 18 | 4 | 53 / 15 | 10 / 44 | 17 | 51 |
| 19 | 5 | 8 / 15 | 55 / 39 | 18 | 48 |
| 20 | 5 | 24 / 15 | 34 / 34 | 19 | 46 |
| 21 | 5 | 40 / 15 | 8 / 28 | 20 | 43 |
| 22 | 5 | 55 / 15 | 36 / 22 | 21 | 40 |
| 23 | 6 | 10 / 15 | 48 / 16 | 22 | 37 |
| 24 | 6 | 26 / 15 | 14 / 8 | 23 | 33 |
| 25 | 6 | 41 / 15 | 22 / 2 | 24 | 29 |
| 26 | 6 | 56 / 14 | 24 / 51 | 25 | 25 |
| 27 | 7 | 11 / 14 | 19 / 48 | 26 | 20 |
| 28 | 7 | 26 / 14 | 7 / 39 | 27 | 14 |
| 29 | 7 | 40 / 14 | 46 / 32 | 28 | 9 |
| 30 | 7 | 55 / 14 | 19 / 23 | 29 | 3 |

| | Ascens dra | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 31 | 8 | 9 / 14 | 41 / 15 | 29 | 57 |
| 32 | | 23 / 14 | 56 / 7 | 30 | 50 |
| 33 | | 38 / 13 | 3 / 56 | 31 | 42 |
| 34 | 8 | 51 / 13 | 49 / 48 | 32 | 34 |
| 35 | 9 | 5 / 13 | 41 / 39 | 33 | 27 |
| 36 | | 19 / 13 | 26 / 28 | 34 | 17 |
| 37 | | 32 / 13 | 42 / 19 | 35 | 9 |
| 38 | | 46 / 13 | 13 / 8 | 35 | 58 |
| 39 | 9 | 59 / 12 | 21 / 48 | 36 | 48 |
| 40 | 10 | 12 / 12 | 29 / 41 | 37 | 36 |
| 41 | | 24 / 12 | 6 / 34 | 38 | 24 |
| 42 | | 37 / 12 | 41 / 24 | 39 | 13 |
| 43 | 10 | 50 / 12 | 5 / 14 | 40 | 1 |
| 44 | 11 | 2 / 12 | 19 / 2 | 40 | 46 |
| 45 | | 14 / 11 | 21 / 49 | 41 | 32 |
| 46 | | 26 / 11 | 40 / 34 | 42 | 17 |
| 47 | | 37 / 11 | 47 / 24 | 43 | 2 |
| 48 | 11 | 49 / 11 | 12 / 13 | 43 | 44 |
| 49 | 12 | 0 / 10 | 24 / 49 | 44 | 27 |
| 50 | | 11 / 10 | 24 / 44 | 45 | 9 |
| 51 | | 22 / 10 | 9 / 33 | 45 | 51 |
| 52 | | 32 / 10 | 42 / 19 | 46 | 31 |
| 53 | | 43 / 10 | 1 / 54 | 47 | 10 |
| 54 | 12 | 53 / 9 | 6 / 42 | 47 | 50 |
| 55 | 13 | 2 / 9 | 48 / 37 | 48 | 28 |
| 56 | | 12 / 9 | 35 / 23 | 48 | 4 |
| 57 | | 21 / 9 | 48 / 8 | 49 | 40 |
| 58 | | 31 / 8 | 6 / 44 | 50 | 16 |
| 59 | | 40 / 8 | 0 / 58 | 50 | 50 |
| 60 | | 48 / 8 | 38 / 23 | 51 | 23 |

| | Ascens dra | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 61 | 13 | 57 / 8 | 1 / 8 | 51 | 56 |
| 62 | 14 | 5 / 7 | 9 / 52 | 52 | 58 |
| 63 | | 13 / 7 | 1 / 37 | 52 | 59 |
| 64 | | 20 / 7 | 38 / 21 | 53 | 29 |
| 65 | | 27 / 7 | 59 / 9 | 53 | 57 |
| 66 | | 34 / 6 | 4 / 49 | 54 | 24 |
| 67 | | 41 / 6 | 43 / 33 | 54 | 42 |
| 68 | | 48 / 6 | 26 / 16 | 55 | 17 |
| 69 | 14 | 54 / 6 | 42 / 0 | 55 | 42 |
| 70 | 15 | 0 / 5 | 42 / 45 | 56 | 5 |
| 71 | 15 | 6 / 5 | 25 / 26 | 56 | 28 |
| 72 | | 11 / 5 | 51 / 9 | 56 | 49 |
| 73 | | 17 / 4 | 0 / 53 | 57 | 10 |
| 74 | | 21 / 4 | 53 / 35 | 57 | 28 |
| 75 | | 26 / 4 | 28 / 17 | 57 | 47 |
| 76 | | 30 / 4 | 24 / 1 | 58 | 4 |
| 77 | | 34 / 3 | 46 / 43 | 58 | 20 |
| 78 | | 38 / 3 | 29 / 26 | 58 | 34 |
| 79 | | 41 / 3 | 55 / 7 | 58 | 47 |
| 80 | | 44 / 2 | 2 / 40 | 59 | 1 |
| 81 | | 47 / 2 | 52 / 33 | 59 | 12 |
| 82 | | 50 / 2 | 25 / 14 | 59 | 21 |
| 83 | | 52 / 1 | 39 / 51 | 59 | 31 |
| 84 | | 54 / 1 | 36 / 39 | 59 | 39 |
| 85 | | 56 / 1 | 14 / 21 | 59 | 44 |
| 86 | | 57 / 1 | 36 / 3 | 59 | 50 |
| 87 | | 58 / 0 | 39 / 44 | 59 | 54 |
| 88 | | 59 / 0 | 34 / 27 | 59 | 57 |
| 89 | 15 | 59 / 0 | 51 / 9 | 59 | 59 |
| 90 | 16 | 0 / 0 | 0 / 0 | 60 | 0 |

# 17

| | Ascens | | | dr̄a | |
|---|---|---|---|---|---|
| | σ | m | 2 | m | 2 |
| 1 | 0 | 11<br>17 | 33<br>32 | 1 | 0 |
| 2 | 0 | 35<br>17 | 5<br>31 | 2 | 0 |
| 3 | 0 | 52<br>17 | 36<br>31 | 3 | 0 |
| 4 | 1 | 10<br>17 | 7<br>30 | 4 | 0 |
| 5 | 1 | 27<br>17 | 37<br>28 | 4 | 59 |
| 6 | 1 | 45<br>17 | 5<br>26 | 5 | 59 |
| 7 | 2 | 2<br>17 | 31<br>24 | 6 | 59 |
| 8 | 2 | 19<br>17 | 55<br>22 | 7 | 59 |
| 9 | 2 | 37<br>17 | 17<br>20 | 8 | 58 |
| 10 | 2 | 54<br>17 | 37<br>16 | 9 | 57 |
| 11 | 3 | 11<br>17 | 53<br>13 | 10 | 56 |
| 12 | 3 | 29<br>17 | 6<br>10 | 11 | 55 |
| 13 | 3 | 46<br>17 | 16<br>4 | 12 | 54 |
| 14 | 4 | 3<br>17 | 21<br>2 | 13 | 53 |
| 15 | 4 | 20<br>16 | 23<br>58 | 14 | 52 |
| 16 | 4 | 37<br>16 | 21<br>52 | 15 | 49 |
| 17 | 4 | 54<br>16 | 13<br>48 | 16 | 48 |
| 18 | 5 | 11<br>16 | 1<br>42 | 17 | 46 |
| 19 | 5 | 27<br>16 | 43<br>37 | 18 | 44 |
| 20 | 5 | 44<br>16 | 20<br>31 | 19 | 41 |
| 21 | 6 | 0<br>16 | 51<br>24 | 20 | 38 |
| 22 | 6 | 17<br>16 | 16<br>19 | 21 | 35 |
| 23 | 6 | 33<br>16 | 35<br>12 | 22 | 31 |
| 24 | 6 | 49<br>16 | 47<br>4 | 23 | 27 |
| 25 | 7 | 5<br>15 | 51<br>58 | 24 | 23 |
| 26 | 7 | 21<br>15 | 49<br>50 | 25 | 19 |
| 27 | 7 | 37<br>15 | 39<br>42 | 26 | 13 |
| 28 | 7 | 53<br>15 | 21<br>34 | 27 | 8 |
| 29 | 8 | 8<br>15 | 55<br>26 | 28 | 3 |
| 30 | 8 | 24<br>15 | 21<br>17 | 28 | 57 |

| | Ascens | | | dr̄a | |
|---|---|---|---|---|---|
| | σ | m | 2 | m | 2 |
| 31 | 8 | 29<br>15 | 38<br>8 | 29 | 50 |
| 32 | 8 | 54<br>14 | 46<br>59 | 30 | 43 |
| 33 | 9 | 9<br>14 | 54<br>49 | 31 | 36 |
| 34 | | 24<br>14 | 34<br>40 | 32 | 28 |
| 35 | | 39<br>14 | 14<br>29 | 33 | 19 |
| 36 | 9 | 53<br>14 | 23<br>20 | 34 | 10 |
| 37 | 10 | 8<br>14 | 3<br>8 | 35 | 1 |
| 38 | | 22<br>13 | 11<br>58 | 35 | 51 |
| 39 | | 36<br>13 | 9<br>46 | 36 | 40 |
| 40 | 10 | 49<br>13 | 55<br>36 | 37 | 30 |
| 41 | 11 | 3<br>13 | 31<br>23 | 38 | 17 |
| 42 | | 16<br>13 | 54<br>12 | 39 | 6 |
| 43 | | 30<br>12 | 6<br>59 | 39 | 53 |
| 44 | | 43<br>12 | 5<br>48 | 40 | 40 |
| 45 | 11 | 55<br>12 | 53<br>34 | 41 | 24 |
| 46 | 12 | 8<br>12 | 27<br>22 | 42 | 10 |
| 47 | | 20<br>12 | 49<br>8 | 42 | 54 |
| 48 | .. | 32<br>11 | 57<br>55 | 43 | 37 |
| 49 | | 44<br>11 | 52<br>41 | 44 | 20 |
| 50 | 12 | 56<br>11 | 33<br>27 | 45 | 2 |
| 51 | 13 | 8<br>11 | 0<br>13 | 45 | 44 |
| 52 | | 19<br>10 | 13<br>58 | 46 | 24 |
| 53 | | 30<br>10 | 11<br>44 | 47 | 5 |
| 54 | | 40<br>10 | 56<br>29 | 47 | 43 |
| 55 | 13 | 51<br>10 | 25<br>14 | 48 | 21 |
| 56 | 14 | 1<br>9 | 39<br>59 | 48 | 59 |
| 57 | | 11<br>9 | 38<br>44 | 49 | 36 |
| 58 | | 21<br>9 | 22<br>28 | 50 | 11 |
| 59 | | 30<br>9 | 50<br>11 | 50 | 44 |
| 60 | 14 | 40<br>8 | 1<br>56 | 51 | 20 |

| | Ascens | | | dr̄a | |
|---|---|---|---|---|---|
| | σ | m | 2 | m | 2 |
| 61 | | 48<br>8 | [illegible]<br>40 | 51 | 53 |
| 62 | 14 | 57<br>8 | 37<br>23 | 52 | 24 |
| 63 | 15 | 6<br>8 | 0<br>7 | 52 | 55 |
| 64 | | 14<br>7 | 7<br>44 | 53 | 25 |
| 65 | | 21<br>7 | 56<br>33 | 53 | 54 |
| 66 | | 29<br>7 | 29<br>16 | 54 | 22 |
| 67 | | 36<br>6 | 54<br>58 | 54 | 49 |
| 68 | | 43<br>6 | 43<br>41 | 55 | 15 |
| 69 | | 50<br>6 | 27<br>23 | [illegible] | 40 |
| 70 | 15 | 56<br>6 | 47<br>6 | 56 | 4 |
| 71 | 16 | 2<br>5 | 53<br>47 | 56 | 26 |
| 72 | 16 | 8<br>5 | 40<br>30 | 56 | 48 |
| 73 | | 14<br>5 | 10<br>11 | 57 | 8 |
| 74 | | 19<br>4 | 21<br>54 | 57 | 28 |
| 75 | | 24<br>4 | 15<br>34 | 57 | 44 |
| 76 | | 28<br>4 | 49<br>17 | 58 | 3 |
| 77 | | 33<br>3 | 6<br>57 | 58 | 18 |
| 78 | | 37<br>3 | 3<br>39 | 58 | 34 |
| 79 | | 40<br>3 | 42<br>21 | 58 | 48 |
| 80 | | 44<br>3 | 3<br>1 | 59 | 0 |
| 81 | | 47<br>2 | 4<br>42 | 59 | 11 |
| 82 | | 49<br>2 | 46<br>24 | 59 | 22 |
| 83 | | 52<br>2 | 10<br>5 | 59 | 30 |
| 84 | | 54<br>1 | 15<br>44 | 59 | 37 |
| 85 | | 56<br>1 | 0<br>26 | 59 | 44 |
| 86 | | 57<br>1 | 26<br>7 | 59 | 51 |
| 87 | | 58<br>0 | 43<br>48 | 59 | 55 |
| 88 | | 59<br>0 | 21<br>29 | 59 | 58 |
| 89 | 16 | 59<br>0 | 50<br>10 | 59 | 59 |
| 90 | 17 | 0<br>0 | 0<br>0 | 60 | 0 |

| | Arcus Dia | | | | |
|---|---|---|---|---|---|
| | G | m | s | m | s |
| 1 | 0 | 18<br>18 | 33<br>32 | 0 | 59 |
| 2 | 0 | 37<br>18 | 5<br>31 | 1 | 59 |
| 3 | 0 | 55<br>18 | 36<br>31 | 2 | 59 |
| 4 | 1 | 14<br>18 | 7<br>29 | 3 | 58 |
| 5 | 1 | 32<br>18 | 36<br>28 | 4 | 58 |
| 6 | 1 | 51<br>18 | 4<br>26 | 5 | 57 |
| 7 | 2 | 9<br>18 | 30<br>24 | 6 | 56 |
| 8 | 2 | 27<br>18 | 54<br>21 | 7 | 55 |
| 9 | 2 | 46<br>18 | 15<br>19 | 8 | 55 |
| 10 | 3 | 4<br>18 | 34<br>15 | 9 | 53 |
| 11 | 3 | 22<br>18 | 49<br>12 | 10 | 53 |
| 12 | 3 | 41<br>18 | 1<br>9 | 11 | 52 |
| 13 | 3 | 59<br>18 | 10<br>4 | 12 | 50 |
| 14 | 4 | 17<br>18 | 14<br>1 | 13 | 49 |
| 15 | 4 | 35<br>17 | 15<br>55 | 14 | 46 |
| 16 | 4 | 53<br>17 | 10<br>51 | 15 | 45 |
| 17 | 5 | 11<br>17 | 1<br>46 | 16 | 42 |
| 18 | 5 | 28<br>17 | 47<br>40 | 17 | 40 |
| 19 | 5 | 46<br>17 | 27<br>34 | 18 | 37 |
| 20 | 6 | 4<br>17 | 1<br>28 | 19 | 35 |
| 21 | 6 | 21<br>17 | 29<br>22 | 20 | 32 |
| 22 | 6 | 38<br>17 | 51<br>15 | 21 | 28 |
| 23 | 6 | 56<br>17 | 6<br>8 | 22 | 24 |
| 24 | 7 | 13<br>17 | 14<br>0 | 23 | 20 |
| 25 | 7 | 30<br>16 | 14<br>54 | 24 | 16 |
| 26 | 7 | 47<br>16 | 8<br>44 | 25 | 11 |
| 27 | 8 | 3<br>16 | 52<br>37 | 26 | 7 |
| 28 | | 20<br>16 | 29<br>29 | 27 | 1 |
| 29 | | 36<br>16 | 58<br>20 | 27 | 54 |
| 30 | 8 | 53<br>16 | 18<br>10 | 28 | 49 |

| | Arcus Dia | | | | |
|---|---|---|---|---|---|
| | G | m | s | m | s |
| 31 | 9 | 9<br>16 | 28<br>1 | 29 | 43 |
| 32 | | 25<br>15 | 29<br>52 | 30 | 36 |
| 33 | | 41<br>15 | 21<br>41 | 31 | 27 |
| 34 | 9 | 57<br>15 | 2<br>31 | 32 | 20 |
| 35 | 10 | 12<br>15 | 33<br>20 | 33 | 11 |
| 36 | | 27<br>15 | 53<br>11 | 34 | 4 |
| 37 | | 43<br>14 | 4<br>58 | 34 | 52 |
| 38 | 10 | 58<br>14 | 2<br>47 | 35 | 43 |
| 39 | 11 | 12<br>14 | 49<br>36 | 36 | 33 |
| 40 | | 27<br>14 | 25<br>23 | 37 | 22 |
| 41 | | 41<br>14 | 48<br>12 | 38 | 11 |
| 42 | 11 | 56<br>13 | 0<br>49 | 38 | 58 |
| 43 | 12 | 9<br>13 | 49<br>36 | 39 | 45 |
| 44 | | 23<br>13 | 25<br>52 | 40 | 31 |
| 45 | | 37<br>13 | 17<br>20 | 41 | 18 |
| 46 | 12 | 50<br>13 | 37<br>6 | 42 | 2 |
| 47 | 13 | 3<br>12 | 43<br>51 | 42 | 46 |
| 48 | | 16<br>12 | 34<br>38 | 43 | 31 |
| 49 | | 29<br>12 | 12<br>23 | 44 | 14 |
| 50 | | 41<br>12 | 35<br>9 | 44 | 56 |
| 51 | 13 | 53<br>11 | 44<br>42 | 45 | 37 |
| 52 | 14 | 5<br>11 | 39<br>38 | 46 | 18 |
| 53 | | 17<br>11 | 16<br>23 | 46 | 58 |
| 54 | | 28<br>11 | 39<br>8 | 47 | 38 |
| 55 | | 39<br>10 | 47<br>51 | 48 | 16 |
| 56 | 14 | 50<br>10 | 38<br>36 | 48 | 54 |
| 57 | 15 | 1<br>10 | 14<br>19 | 49 | 30 |
| 58 | | 11<br>10 | 33<br>2 | 50 | 6 |
| 59 | | 21<br>9 | 35<br>46 | 50 | 42 |
| 60 | | 31<br>9 | 21<br>29 | 51 | 14 |

| | Arcus Dia | | | | |
|---|---|---|---|---|---|
| | G | m | s | m | s |
| 61 | 15 | 40<br>9 | 50<br>11 | 51 | 48 |
| 62 | | 50<br>8 | 1<br>54 | 52 | 20 |
| 63 | 15 | 58<br>8 | 55<br>37 | 52 | 51 |
| 64 | 16 | 7<br>8 | 32<br>18 | 53 | 21 |
| 65 | | 15<br>8 | 50<br>1 | 53 | 51 |
| 66 | | 23<br>7 | 51<br>43 | 54 | 19 |
| 67 | | 31<br>7 | 34<br>24 | 54 | 46 |
| 68 | | 38<br>7 | 58<br>6 | 55 | 12 |
| 69 | 16 | 46<br>6 | 4<br>47 | 55 | 36 |
| 70 | | 52<br>6 | 51<br>28 | 56 | 0 |
| 71 | 16 | 59<br>6 | 19<br>9 | 56 | 23 |
| 72 | 17 | 5<br>5 | 28<br>50 | 56 | 45 |
| 73 | | 11<br>5 | 18<br>31 | 57 | 6 |
| 74 | | 16<br>5 | 49<br>11 | 57 | 26 |
| 75 | | 22<br>4 | 0<br>42 | 57 | 44 |
| 76 | | 26<br>4 | 42<br>52 | 58 | 1 |
| 77 | | 31<br>4 | 34<br>13 | 58 | 18 |
| 78 | | 35<br>3 | 47<br>43 | 58 | 33 |
| 79 | | 39<br>3 | 30<br>33 | 58 | 46 |
| 80 | | 43<br>3 | 3<br>12 | 58 | 59 |
| 81 | | 46<br>2 | 15<br>53 | 59 | 11 |
| 82 | | 49<br>2 | 8<br>32 | 59 | 21 |
| 83 | | 51<br>2 | 40<br>12 | 59 | 31 |
| 84 | | 53<br>1 | 52<br>43 | 59 | 39 |
| 85 | | 55<br>1 | 35<br>32 | 59 | 45 |
| 86 | | 57<br>1 | 7<br>11 | 59 | 50 |
| 87 | | 58<br>0 | 18<br>41 | 59 | 54 |
| 88 | | 59<br>0 | 19<br>50 | 59 | 57 |
| 89 | 17 | 59<br>0 | 49<br>11 | 59 | 59 |
| 90 | 18 | 0<br>0 | 0<br>0 | 60 | 0 |

19

| | Aerub | | | dia | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 1 | 0 | 19<br>19 | 32<br>32 | 0 | 59 |
| 2 | 0 | 39<br>19 | 4<br>31 | 1 | 58 |
| 3 | 0 | 58<br>19 | 34<br>30 | 2 | 57 |
| 4 | 1 | 18<br>19 | 5<br>29 | 3 | 57 |
| 5 | 1 | 37<br>19 | 34<br>27 | 4 | 56 |
| 6 | 1 | 57<br>19 | 1<br>25 | 5 | 55 |
| 7 | 2 | 16<br>19 | 26<br>23 | 6 | 54 |
| 8 | 2 | 35<br>19 | 49<br>21 | 7 | 53 |
| 9 | 2 | 55<br>19 | 10<br>17 | 8 | 51 |
| 10 | 3 | 14<br>19 | 27<br>15 | 9 | 51 |
| 11 | 3 | 33<br>19 | 42<br>11 | 10 | 49 |
| 12 | 3 | 52<br>19 | 53<br>7 | 11 | 47 |
| 13 | 4 | 12<br>19 | 6<br>3 | 12 | 45 |
| 14 | 4 | 31<br>18 | 3<br>58 | 13 | 43 |
| 15 | 4 | 50<br>18 | 1<br>54 | 14 | 42 |
| 16 | 5 | 8<br>18 | 55<br>48 | 15 | 39 |
| 17 | 5 | 27<br>18 | 43<br>44 | 16 | 37 |
| 18 | 5 | 46<br>18 | 27<br>37 | 17 | 34 |
| 19 | 6 | 5<br>18 | 4<br>32 | 18 | 32 |
| 20 | 6 | 23<br>18 | 36<br>25 | 19 | 28 |
| 21 | 6 | 42<br>18 | 1<br>18 | 20 | 24 |
| 22 | 7 | 0<br>18 | 19<br>11 | 21 | 21 |
| 23 | 7 | 18<br>18 | 30<br>4 | 22 | 17 |
| 24 | | 36<br>17 | 34<br>56 | 23 | 13 |
| 25 | 7 | 54<br>17 | 30<br>49 | 24 | 9 |
| 26 | 8 | 12<br>17 | 19<br>40 | 25 | 3 |
| 27 | | 29<br>17 | 59<br>31 | 25 | 58 |
| 28 | 8 | 47<br>17 | 30<br>23 | 26 | 53 |
| 29 | 9 | 4<br>17 | 53<br>14 | 27 | 47 |
| 30 | | 22<br>17 | 7<br>4 | 28 | 40 |

| | Aerub | | | dia | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 31 | 9 | 39<br>16 | 11<br>44 | 29 | 33 |
| 32 | 9 | 56<br>16 | 5<br>43 | 30 | 26 |
| 33 | 10 | 12<br>16 | 48<br>34 | 31 | 20 |
| 34 | | 29<br>16 | 22<br>22 | 32 | 11 |
| 35 | 10 | 45<br>16 | 44<br>12 | 33 | 3 |
| 36 | 11 | 1<br>16 | 56<br>0 | 33 | 54 |
| 37 | | 17<br>15 | 56<br>49 | 34 | 45 |
| 38 | | 33<br>15 | 45<br>37 | 35 | 36 |
| 39 | 11 | 49<br>15 | 22<br>25 | 36 | 25 |
| 40 | 12 | 4<br>15 | 47<br>12 | 37 | 13 |
| 41 | | 19<br>14 | 59<br>59 | 38 | 1 |
| 42 | | 34<br>14 | 58<br>46 | 38 | 49 |
| 43 | 12 | 49<br>14 | 44<br>32 | 39 | 36 |
| 44 | 13 | 4<br>14 | 16<br>19 | 40 | 23 |
| 45 | | 18<br>14 | 35<br>4 | 41 | 9 |
| 46 | | 32<br>13 | 39<br>50 | 41 | 55 |
| 47 | 13 | 46<br>13 | 29<br>36 | 42 | 39 |
| 48 | 14 | 0<br>13 | 5<br>21 | 43 | 23 |
| 49 | | 13<br>13 | 26<br>5 | 44 | 6 |
| 50 | | 26<br>12 | 31<br>50 | 44 | 49 |
| 51 | | 39<br>12 | 21<br>34 | 45 | 31 |
| 52 | 14 | 51<br>12 | 56<br>18 | 46 | 12 |
| 53 | 15 | 4<br>12 | 14<br>3 | 46 | 52 |
| 54 | | 16<br>11 | 17<br>40 | 47 | 31 |
| 55 | | 28<br>11 | 3<br>29 | 48 | 9 |
| 56 | | 39<br>11 | 32<br>12 | 48 | 47 |
| 57 | 15 | 50<br>10 | 44<br>54 | 49 | 24 |
| 58 | 16 | 1<br>10 | 39<br>37 | 50 | 0 |
| 59 | | 12<br>10 | 16<br>30 | 50 | 36 |
| 60 | | 20<br>10 | 46<br>2 | 51 | 9 |

| | Aerub | | | dia | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 61 | 16 | 32<br>9 | 38<br>43 | 51 | 43 |
| 62 | | 42<br>9 | 21<br>25 | 52 | 16 |
| 63 | 16 | 51<br>9 | 46<br>7 | 52 | 47 |
| 64 | 17 | 0<br>8 | 53<br>48 | 53 | 17 |
| 65 | | 9<br>8 | 41<br>29 | 53 | 47 |
| 66 | | 18<br>8 | 10<br>10 | 54 | 15 |
| 67 | | 26<br>7 | 20<br>50 | 54 | 42 |
| 68 | | 34<br>7 | 10<br>30 | 55 | 9 |
| 69 | | 41<br>7 | 40<br>11 | 55 | 34 |
| 70 | | 48<br>6 | 51<br>51 | 55 | 58 |
| 71 | 17 | 55<br>6 | 22<br>31 | 56 | 22 |
| 72 | 18 | 2<br>6 | 13<br>11 | 56 | 43 |
| 73 | | 8<br>5 | 34<br>51 | 57 | 5 |
| 74 | | 14<br>5 | 15<br>29 | 57 | 25 |
| 75 | | 19<br>5 | 44<br>9 | 57 | 44 |
| 76 | | 24<br>4 | 53<br>49 | 58 | 2 |
| 77 | | 29<br>4 | 22<br>28 | 58 | 18 |
| 78 | | 34<br>4 | 10<br>6 | 58 | 32 |
| 79 | | 38<br>3 | 16<br>46 | 58 | 46 |
| 80 | | 42<br>3 | 2<br>24 | 58 | 59 |
| 81 | | 45<br>3 | 26<br>3 | 59 | 11 |
| 82 | | 48<br>2 | 29<br>42 | 59 | 22 |
| 83 | | 51<br>2 | 11<br>20 | 59 | 30 |
| 84 | | 53<br>1 | 31<br>48 | 59 | 38 |
| 85 | | 55<br>1 | 29<br>58 | 59 | 46 |
| 86 | | 57<br>1 | 7<br>14 | 59 | 51 |
| 87 | | 58<br>0 | 22<br>42 | 59 | 54 |
| 88 | | 59<br>0 | 16<br>32 | 59 | 56 |
| 89 | 18 | 59<br>0 | 48<br>12 | 60 | 0 |
| 90 | 19 | 0<br>0 | 0<br>0 | 60 | 0 |

## Arcus diei

| | G | M | S | m | s |
|---|---|---|---|---|---|
| 1 | 0 | 20/20 | 31/31 | 0 | 59 |
| 2 | 0 | 41/20 | 2/30 | 1 | 58 |
| 3 | 1 | 1/20 | 32/30 | 2 | 57 |
| 4 | | 22/20 | 2/28 | 3 | 55 |
| 5 | 1 | 42/20 | 30/26 | 4 | 54 |
| 6 | 2 | 2/20 | 56/24 | 5 | 53 |
| 7 | | 23/20 | 20/22 | 6 | 51 |
| 8 | 2 | 43/20 | 42/19 | 7 | 50 |
| 9 | 3 | 4/20 | 1/17 | 8 | 49 |
| 10 | | 24/20 | 18/13 | 9 | 47 |
| 11 | 3 | 44/20 | 31/9 | 10 | 44 |
| 12 | 4 | 4/20 | 40/4 | 11 | 43 |
| 13 | | 24/20 | 45/1 | 12 | 46 |
| 14 | 4 | 44/19 | 56/57 | 13 | 39 |
| 15 | 5 | 4/19 | 43/51 | 14 | 30 |
| 16 | | 24/19 | 24/46 | 15 | 34 |
| 17 | 5 | 44/19 | 20/41 | 16 | 31 |
| 18 | 6 | 4/19 | 1/35 | 17 | 28 |
| 19 | | 23/19 | 36/28 | 18 | 25 |
| 20 | 6 | 3/19 | 4/21 | 19 | 21 |
| 21 | 7 | 2/19 | 37/14 | 20 | 18 |
| 22 | | 27/19 | 40/7 | 21 | 14 |
| 23 | | 40/19 | 47/0 | 22 | 10 |
| 24 | 7 | 59/18 | 47/42 | 23 | 6 |
| 25 | 8 | 18/18 | 39/43 | 24 | 1 |
| 26 | | 37/18 | 22/35 | 24 | 56 |
| 27 | 8 | 55/18 | 57/26 | 25 | 51 |
| 28 | 9 | 14/18 | 23/17 | 26 | 46 |
| 29 | | 33/18 | 40/7 | 27 | 39 |
| 30 | 9 | 50/17 | 47/57 | 28 | 33 |

## Arcus diei

| | G | M | S | m | s |
|---|---|---|---|---|---|
| 31 | 10 | 8/17 | 44/47 | 29 | 26 |
| 32 | | 26/17 | 31/37 | 30 | 19 |
| 33 | 10 | 44/17 | 8/25 | 31 | 11 |
| 34 | 11 | 1/17 | 33/14 | 32 | 3 |
| 35 | | 18/17 | 47/3 | 32 | 55 |
| 36 | | 35/16 | 50/51 | 33 | 47 |
| 37 | 11 | 52/16 | 51/40 | 34 | 37 |
| 38 | 12 | 9/16 | 21/26 | 35 | 26 |
| 39 | | 25/16 | 47/13 | 36 | 15 |
| 40 | | 42/16 | 0/0 | 37 | 5 |
| 41 | 12 | 58/15 | 0/47 | 37 | 54 |
| 42 | 13 | 13/15 | 47/33 | 38 | 42 |
| 43 | | 29/15 | 20/19 | 39 | 29 |
| 44 | | 44/15 | 39/5 | 40 | 15 |
| 45 | 13 | 59/14 | 44/40 | 41 | 1 |
| 46 | 14 | 14/14 | 34/35 | 41 | 46 |
| 47 | | 29/14 | 8/20 | 42 | 32 |
| 48 | | 43/14 | 28/4 | 43 | 14 |
| 49 | 14 | 57/13 | 32/48 | 43 | 59 |
| 50 | 15 | 11/13 | 20/32 | 44 | 42 |
| 51 | | 24/13 | 42/16 | 45 | 23 |
| 52 | | 38/12 | 8/58 | 46 | 4 |
| 53 | 15 | 51/12 | 6/43 | 46 | 45 |
| 54 | 16 | 3/12 | 48/22 | 47 | 25 |
| 55 | | 16/12 | 12/7 | 48 | 4 |
| 56 | | 28/11 | 19/49 | 48 | 42 |
| 57 | | 40/11 | 8/31 | 49 | 19 |
| 58 | 16 | 51/11 | 39/13 | 49 | 55 |
| 59 | 17 | 2/10 | 52/53 | 50 | 30 |
| 60 | | 13/10 | 54/36 | 51 | 4 |

## Arcus diei

| | G | M | S | m | s |
|---|---|---|---|---|---|
| 61 | 17 | 24/10 | 21/16 | 51 | 37 |
| 62 | | 34/9 | 37/56 | 52 | 11 |
| 63 | | 44/9 | 33/37 | 52 | 43 |
| 64 | 17 | 54/9 | 10/18 | 53 | 13 |
| 65 | 18 | 3/8 | 28/51 | 53 | 42 |
| 66 | | 12/8 | 25/37 | 54 | 12 |
| 67 | | 21/8 | 2/17 | 54 | 40 |
| 68 | 18 | 29/7 | 19/56 | 55 | 6 |
| 69 | | 37/7 | 19/32 | 55 | 32 |
| 70 | | 44/7 | 44/5 | 55 | 57 |
| 71 | | 52/6 | 4/42 | 56 | 20 |
| 72 | 18 | 58/6 | 56/33 | 56 | 43 |
| 73 | 19 | 5/6 | 39/11 | 57 | 3 |
| 74 | 19 | 11/5 | 40/48 | 57 | 21 |
| 75 | | 17/5 | 28/27 | 57 | 41 |
| 76 | | 22/5 | 55/5 | 57 | 59 |
| 77 | | 28/4 | 0/42 | 58 | 15 |
| 78 | | 33/4 | 42/20 | 58 | 31 |
| 79 | | 37/3 | 2/59 | 58 | 46 |
| 80 | | 41/3 | 1/36 | 58 | 58 |
| 81 | 19 | 44/3 | 37/14 | 59 | 11 |
| 82 | 19 | 47/2 | 51/50 | 59 | 19 |
| 83 | | 50/2 | 47/28 | 59 | 29 |
| 84 | | 53/2 | 9/6 | 59 | 38 |
| 85 | | 55/1 | 15/43 | 59 | 44 |
| 86 | | 56/1 | 58/19 | 59 | 50 |
| 87 | | 58/0 | 17/57 | 59 | 54 |
| 88 | | 59/0 | 14/34 | 59 | 58 |
| 89 | 19 | 59/0 | 49/11 | 60 | 0 |
| 90 | 20 | 0/0 | 0/0 | 60 | 0 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 1 | 0 | 21 / 21 | 50 / 30 | 0 | 59 |
| 2 | 0 | 43 / 21 | 0 / 29 | 1 | 57 |
| 3 | 1 | 4 / 21 | 29 / 28 | 2 | 55 |
| 4 | | 25 / 21 | 57 / 27 | 3 | 54 |
| 5 | 1 | 47 / 21 | 34 / 25 | 4 | 52 |
| 6 | 2 | 8 / 21 | 49 / 22 | 5 | 50 |
| 7 | | 30 / 21 | 11 / 21 | 6 | 49 |
| 8 | 2 | 51 / 21 | 32 / 18 | 7 | 41 |
| 9 | 3 | 12 / 21 | 50 / 14 | 8 | 44 |
| 10 | | 34 / 21 | 4 / 11 | 9 | 43 |
| 11 | 3 | 55 / 21 | 14 / 8 | 10 | 41 |
| 12 | 4 | 16 / 21 | 23 / 3 | 11 | 38 |
| 13 | | 37 / 20 | 26 / 59 | 12 | 36 |
| 14 | 4 | 58 / 20 | 25 / 54 | 13 | 33 |
| 15 | 5 | 19 / 20 | 19 / 49 | 14 | 31 |
| 16 | 5 | 40 / 20 | 8 / 43 | 15 | 28 |
| 17 | 6 | 0 / 20 | 51 / 38 | 16 | 24 |
| 18 | | 21 / 20 | 29 / 33 | 17 | 22 |
| 19 | 6 | 42 / 20 | 1 / 24 | 18 | 18 |
| 20 | 7 | 2 / 20 | 25 / 18 | 19 | 15 |
| 21 | | 22 / 20 | 43 / 11 | 20 | 11 |
| 22 | 7 | 42 / 20 | 54 / 3 | 21 | 7 |
| 23 | 8 | 2 / 19 | 57 / 56 | 22 | 3 |
| 24 | | 22 / 19 | 53 / 47 | 22 | 57 |
| 25 | 8 | 42 / 19 | 40 / 38 | 23 | 53 |
| 26 | 9 | 2 / 19 | 18 / 30 | 24 | 48 |
| 27 | | 21 / 19 | 48 / 21 | 25 | 42 |
| 28 | 9 | 41 / 19 | 9 / 10 | 26 | 34 |
| 29 | 10 | 0 / 19 | 19 / 1 | 27 | 30 |
| 30 | | 19 / 18 | 20 / 40 | 28 | 23 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 31 | 10 | 38 / 18 | 10 / 40 | 29 | 17 |
| 32 | 10 | 56 / 18 | 50 / 29 | 30 | 9 |
| 33 | 11 | 15 / 18 | 29 / 17 | 31 | 1 |
| 34 | | 33 / 18 | 36 / 6 | 31 | 55 |
| 35 | 11 | 51 / 17 | 42 / 55 | 32 | 46 |
| 36 | 12 | 9 / 17 | 37 / 41 | 33 | 35 |
| 37 | | 27 / 17 | 18 / 29 | 34 | 27 |
| 38 | 12 | 44 / 17 | 47 / 15 | 35 | 16 |
| 39 | 13 | 2 / 17 | 2 / 3 | 36 | 7 |
| 40 | | 19 / 16 | 5 / 49 | 36 | 55 |
| 41 | | 35 / 16 | 54 / 35 | 37 | 43 |
| 42 | 13 | 52 / 16 | 39 / 20 | 38 | 31 |
| 43 | 14 | 8 / 16 | 49 / 5 | 39 | 19 |
| 44 | | 24 / 15 | 54 / 51 | 40 | 6 |
| 45 | | 40 / 15 | 55 / 35 | 40 | 52 |
| 46 | 14 | 56 / 15 | 20 / 20 | 41 | 38 |
| 47 | 15 | 11 / 15 | 40 / 3 | 42 | 22 |
| 48 | | 26 / 14 | 43 / 48 | 43 | 7 |
| 49 | | 41 / 14 | 31 / 31 | 43 | 50 |
| 50 | 15 | 56 / 14 | 2 / 13 | 44 | 33 |
| 51 | 16 | 10 / 13 | 15 / 57 | 45 | 16 |
| 52 | | 24 / 13 | 12 / 39 | 45 | 57 |
| 53 | | 37 / 13 | 51 / 22 | 46 | 38 |
| 54 | 16 | 51 / 13 | 13 / 3 | 47 | 17 |
| 55 | 17 | 4 / 12 | 16 / 45 | 47 | 56 |
| 56 | | 17 / 12 | 1 / 26 | 48 | 34 |
| 57 | | 29 / 12 | 27 / 7 | 49 | 13 |
| 58 | | 41 / 11 | 34 / 48 | 49 | 48 |
| 59 | 17 | 53 / 11 | 22 / 27 | 50 | 23 |
| 60 | 18 | 4 / 11 | 49 / 9 | 50 | 59 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 61 | 18 | 15 / 10 | 58 / 50 | 51 | 34 |
| 62 | | 26 / 10 | 48 / 28 | 52 | 6 |
| 63 | | 37 / 10 | 16 / 7 | 52 | 38 |
| 64 | | 47 / 9 | 33 / 47 | 53 | 10 |
| 65 | 18 | 57 / 9 | 30 / 27 | 53 | 39 |
| 66 | 19 | 6 / 9 | 37 / 5 | 54 | 8 |
| 67 | | 15 / 8 | 42 / 43 | 54 | 35 |
| 68 | | 24 / 8 | 25 / 22 | 55 | 2 |
| 69 | | 32 / 7 | 47 / 59 | 55 | 27 |
| 70 | | 40 / 7 | 46 / 38 | 55 | 52 |
| 71 | | 48 / 7 | 24 / 15 | 56 | 16 |
| 72 | 19 | 55 / 6 | 39 / 53 | 56 | 38 |
| 73 | 20 | 2 / 6 | 32 / 29 | 56 | 59 |
| 74 | | 9 / 6 | 1 / 8 | 57 | 21 |
| 75 | | 15 / 5 | 9 / 45 | 57 | 39 |
| 76 | | 20 / 5 | 54 / 21 | 57 | 57 |
| 77 | | 26 / 4 | 15 / 58 | 58 | 14 |
| 78 | | 31 / 4 | 13 / 35 | 58 | 29 |
| 79 | | 35 / 4 | 48 / 11 | 58 | 43 |
| 80 | | 39 / 3 | 59 / 47 | 58 | 57 |
| 81 | | 43 / 3 | 46 / 24 | 59 | 9 |
| 82 | | 47 / 2 | 10 / 0 | 59 | 20 |
| 83 | | 50 / 2 | 10 / 37 | 59 | 29 |
| 84 | | 52 / 2 | 47 / 12 | 59 | 37 |
| 85 | | 54 / 1 | 59 / 49 | 59 | 44 |
| 86 | | 56 / 1 | 48 / 24 | 59 | 49 |
| 87 | | 58 / 1 | 12 / 0 | 59 | 54 |
| 88 | | 59 / 0 | 12 / 37 | 59 | 57 |
| 89 | 20 | 59 / 0 | 49 / 11 | 60 | 0 |
| 90 | 21 | 0 / 0 | 0 / 0 | 60 | 0 |

| | Ascen recta | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | m | 2 |
| 1 | 0 | 22<br>22 | 29<br>28 | 0 | 58 |
| 2 | 0 | 44<br>22 | 57<br>27 | 1 | 56 |
| 3 | 1 | 7<br>22 | 24<br>27 | 2 | 54 |
| 4 | 1 | 29<br>22 | 51<br>25 | 3 | 52 |
| 5 | 1 | 52<br>22 | 16<br>23 | 4 | 50 |
| 6 | 2 | 14<br>22 | 39<br>21 | 5 | 48 |
| 7 | 2 | 37<br>22 | 0<br>19 | 6 | 46 |
| 8 | 2 | 59<br>22 | 19<br>14 | 7 | 43 |
| 9 | 3 | 21<br>22 | 34<br>13 | 8 | 42 |
| 10 | 3 | 43<br>22 | 47<br>9 | 9 | 39 |
| 11 | 4 | 5<br>22 | 56<br>5 | 10 | 36 |
| 12 | 4 | 28<br>22 | 1<br>1 | 11 | 34 |
| 13 | 4 | 40<br>21 | 2<br>56 | 12 | 31 |
| 14 | 5 | 11<br>21 | 58<br>42 | 13 | 29 |
| 15 | 5 | 33<br>21 | 50<br>46 | 14 | 25 |
| 16 | 5 | 55<br>21 | 36<br>40 | 15 | 22 |
| 17 | 6 | 17<br>21 | 16<br>35 | 16 | 19 |
| 18 | 6 | 38<br>21 | 51<br>28 | 17 | 14 |
| 19 | 7 | 0<br>21 | 19<br>21 | 18 | 11 |
| 20 | 7 | 21<br>21 | 40<br>44 | 19 | 7 |
| 21 | 7 | 42<br>21 | 44<br>7 | 20 | 3 |
| 22 | 8 | 4<br>20 | 1<br>59 | 20 | 59 |
| 23 | 8 | 25<br>20 | 0<br>50 | 21 | 54 |
| 24 | 8 | 45<br>20 | 40<br>43 | 22 | 50 |
| 25 | 9 | 6<br>20 | 33<br>33 | 23 | 44 |
| 26 | 9 | 27<br>20 | 6<br>24 | 24 | 39 |
| 27 | 9 | 47<br>20 | 30<br>14 | 25 | 34 |
| 28 | 10 | 7<br>20 | 44<br>5 | 26 | 28 |
| 29 | 10 | 27<br>19 | 49<br>44 | 27 | 21 |
| 30 | 10 | 47<br>19 | 43<br>44 | 28 | 14 |

| | Ascens recta | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | m | 2 |
| 31 | 11 | 7<br>19 | 27<br>32 | 29 | 7 |
| 32 | 11 | 26<br>19 | 59<br>21 | 30 | 0 |
| 33 | 11 | 46<br>19 | 20<br>11 | 30 | 53 |
| 34 | 12 | 5<br>18 | 31<br>57 | 31 | 43 |
| 35 | 12 | 24<br>18 | 28<br>44 | 32 | 35 |
| 36 | 12 | 43<br>18 | 13<br>33 | 33 | 27 |
| 37 | 13 | 1<br>18 | 44<br>18 | 34 | 16 |
| 38 | . | 20<br>18 | 3<br>6 | 35 | 7 |
| 39 | | 38<br>17 | 5<br>51 | 35 | 50 |
| 40 | 13 | 56<br>17 | 0<br>37 | 36 | 46 |
| 41 | 14 | 13<br>17 | 37<br>33 | 37 | 34 |
| 42 | | 31<br>17 | 0<br>8 | 38 | 22 |
| 43 | 14 | 48<br>16 | 8<br>42 | 39 | 9 |
| 44 | 15. | 5<br>16 | 0<br>37 | 39 | 57 |
| 45 | | 21<br>16 | 37<br>21 | 40 | 43 |
| 46 | | 37<br>16 | 58<br>4 | 41 | 28 |
| 47 | 15 | 54<br>15 | 2<br>48 | 42 | 14 |
| 48 | 16 | 9<br>14 | 50<br>31 | 42 | 58 |
| 49 | | 25<br>14 | 21<br>14 | 43 | 42 |
| 50 | | 40<br>14 | 35<br>56 | 44 | 24 |
| 51 | 16 | 55<br>14 | 31<br>38 | 45 | 6 |
| 52 | 17 | 10<br>14 | 9<br>20 | 45 | 49 |
| 53 | | 24<br>14 | 29<br>1 | 46 | 31 |
| 54 | | 38<br>13 | 30<br>42 | 47 | 10 |
| 55 | 17 | 52<br>13 | 12<br>23 | 47 | 49 |
| 56 | 18 | 5<br>13 | 35<br>5 | 48 | 28 |
| 57 | | 18<br>12 | 40<br>42 | 49 | 5 |
| 58 | | 31<br>12 | 22<br>23 | 49 | 43 |
| 59 | | 43<br>12 | 45<br>3 | 50 | 19 |
| 60 | 18 | 54<br>11 | 48<br>44 | 50 | 54 |

| | Ascens recta | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | m | 2 |
| 61 | 19 | 7<br>11 | 32<br>22 | 51 | 28 |
| 62 | | 18<br>11 | 44<br>6 | 52 | 0 |
| 63 | | 29<br>10 | 44<br>39 | 52 | 32 |
| 64 | | 40<br>10 | 33<br>16 | 53 | 4 |
| 65 | 19 | 50<br>9 | 44<br>56 | 53 | 34 |
| 66 | 20 | 0<br>9 | 54<br>32 | 54 | 2 |
| 67 | | 10<br>9 | 17<br>10 | 54 | 31 |
| 68 | | 19<br>8 | 27<br>47 | 54 | 58 |
| 69 | | 28<br>8 | 14<br>24 | 55 | 24 |
| 70 | | 36<br>8 | 38<br>2 | 55 | 50 |
| 71 | | 44<br>7 | 40<br>37 | 56 | 13 |
| 72 | | 52<br>7 | 17<br>14 | 56 | 36 |
| 73 | 20 | 59<br>6 | 31<br>51 | 56 | 57 |
| 74 | 21 | 6<br>6 | 22<br>26 | 57 | 18 |
| 75 | | 12<br>6 | 48<br>3 | 57 | 38 |
| 76 | | 18<br>5 | 51<br>38 | 57 | 55 |
| 77 | | 24<br>5 | 39<br>13 | 58 | 12 |
| 78 | | 29<br>4 | 42<br>49 | 58 | 28 |
| 79 | | 34<br>4 | 31<br>24 | 58 | 43 |
| 80 | 21 | 38<br>3 | 56<br>49 | 58 | 55 |
| 81 | | 42<br>3 | 55<br>34 | 59 | 8 |
| 82 | | 46<br>3 | 30<br>9 | 59 | 18 |
| 83 | | 49<br>2 | 39<br>45 | 59 | 29 |
| 84 | | 52<br>2 | 24<br>19 | 59 | 37 |
| 85 | | 54<br>1 | 43<br>54 | 59 | 44 |
| 86 | | 56<br>1 | 37<br>29 | 59 | 50 |
| 87 | | 58<br>1 | 6<br>3 | 59 | 54 |
| 88 | | 59<br>0 | 9<br>48 | 59 | 58 |
| 89 | 21 | 59<br>0 | 49<br>11 | 59 | 57 |
| 90 | 22 | 0<br>0 | 0<br>0 | 60 | 0 |

23

| | Arcus | diei | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 1 | 0 | 23 / 23 | 21 / 26 | 0 | 51 |
| 2 | 0 | 48 / 23 | 43 / 24 | 1 | 55 |
| 3 | 1 | 10 / 23 | 48 / 24 | 2 | 53 |
| 4 | | 35 / 23 | 45 / 23 | 3 | 50 |
| 5 | 1 | 57 / 23 | 6 / 21 | 4 | 48 |
| 6 | 2 | 20 / 23 | 27 / 19 | 5 | 45 |
| 7 | 2 | 43 / 23 | 46 / 18 | 6 | 43 |
| 8 | 3 | 7 / 23 | 2 / 14 | 7 | 40 |
| 9 | | 30 / 23 | 16 / 10 | 8 | 37 |
| 10 | 3 | 53 / 23 | 26 / 6 | 9 | 34 |
| 11 | 4 | 16 / 23 | 32 / 3 | 10 | 32 |
| 12 | 4 | 39 / 22 | 35 / 48 | 11 | 29 |
| 13 | 5 | 2 / 22 | 33 / 44 | 12 | 26 |
| 14 | | 24 / 22 | 27 / 48 | 13 | 22 |
| 15 | 5 | 48 / 22 | 15 / 43 | 14 | 19 |
| 16 | 6 | 10 / 22 | 48 / 37 | 15 | 16 |
| 17 | | 33 / 22 | 35 / 31 | 16 | 12 |
| 18 | 6 | 58 / 22 | 6 / 24 | 17 | 8 |
| 19 | 7 | 18 / 22 | 30 / 17 | 18 | 4 |
| 20 | 7 | 40 / 22 | 47 / 10 | 19 | 0 |
| 21 | 8 | 2 / 22 | 57 / 3 | 19 | 56 |
| 22 | | 24 / 21 | 0 / 44 | 20 | 50 |
| 23 | 8 | 46 / 21 | 44 / 46 | 21 | 46 |
| 24 | 9 | 8 / 21 | 40 / 37 | 22 | 41 |
| 25 | | 30 / 21 | 17 / 28 | 23 | 35 |
| 26 | 9 | 51 / 21 | 44 / 19 | 24 | 30 |
| 27 | 10 | 13 / 21 | 4 / 8 | 25 | 23 |
| 28 | | 34 / 20 | 12 / 58 | 26 | 18 |
| 29 | 10 | 55 / 20 | 10 / 47 | 27 | 13 |
| 30 | 11 | 15 / 20 | 57 / 37 | 28 | 5 |
| 31 | | 36 / 20 | 34 / 24 | 28 | 48 |
| 32 | 11 | 56 / 20 | 59 / 14 | 29 | 51 |
| 33 | 12 | 17 / 20 | 13 / 1 | 30 | 43 |
| 34 | | 37 / 19 | 14 / 49 | 31 | 34 |
| 35 | 12 | 57 / 19 | 3 / 30 | 32 | 25 |
| 36 | 13 | 16 / 19 | 59 / 22 | 33 | 16 |
| 37 | | 36 / 19 | 1 / 9 | 34 | 7 |
| 38 | 13 | 55 / 18 | 10 / 55 | 34 | 57 |
| 39 | 14 | 14 / 18 | 1 / 47 | 35 | 47 |
| 40 | | 32 / 18 | 46 / 24 | 36 | 35 |
| 41 | 14 | 51 / 18 | 11 / 11 | 37 | 25 |
| 42 | 15 | 9 / 17 | 22 / 55 | 38 | 12 |
| 43 | | 27 / 17 | 17 / 40 | 39 | 0 |
| 44 | 15 | 44 / 17 | 47 / 23 | 39 | 46 |
| 45 | 16 | 2 / 17 | 20 / 6 | 40 | 33 |
| 46 | | 19 / 16 | 26 / 50 | 41 | 19 |
| 47 | 16 | 36 / 16 | 16 / 32 | 42 | 4 |
| 48 | 16 | 52 / 16 | 48 / 15 | 42 | 49 |
| 49 | 17 | 9 / 16 | 3 / 56 | 43 | 32 |
| 50 | | 24 / 15 | 59 / 38 | 44 | 17 |
| 51 | | 40 / 15 | 37 / 21 | 44 | 59 |
| 52 | 17 | 55 / 15 | 48 / 2 | 45 | 40 |
| 53 | 18 | 11 / 14 | 0 / 40 | 46 | 20 |
| 54 | | 25 / 14 | 40 / 21 | 47 | 2 |
| 55 | | 40 / 14 | 1 / 2 | 47 | 42 |
| 56 | 18 | 54 / 13 | 3 / 22 | 48 | 20 |
| 57 | 19 | 7 / 13 | 44 / 20 | 48 | 58 |
| 58 | | 21 / 12 | 4 / 55 | 49 | 35 |
| 59 | | 34 / 12 | 4 / 38 | 50 | 12 |
| 60 | | 46 / 12 | 42 / 18 | 50 | 47 |
| 61 | 19 | 59 / 11 | 0 / 54 | 51 | 20 |
| 62 | 20 | 10 / 11 | 44 / 32 | 51 | 54 |
| 63 | | 22 / 11 | 26 / 11 | 52 | 27 |
| 64 | | 33 / 10 | 37 / 46 | 52 | 57 |
| 65 | | 44 / 10 | 23 / 24 | 53 | 29 |
| 66 | 20 | 54 / 10 | 47 / 1 | 53 | 58 |
| 67 | 21 | 4 / 9 | 28 / 31 | 54 | 27 |
| 68 | 21 | 14 / 9 | 25 / 13 | 54 | 54 |
| 69 | | 23 / 8 | 38 / 50 | 55 | 21 |
| 70 | | 32 / 8 | 28 / 25 | 55 | 46 |
| 71 | | 40 / 8 | 43 / 0 | 56 | 0 |
| 72 | | 48 / 7 | 43 / 35 | 56 | 33 |
| 73 | 21 | 56 / 7 | 28 / 12 | 56 | 55 |
| 74 | 22 | 3 / 6 | 40 / 46 | 57 | 15 |
| 75 | 22 | 10 / 6 | 20 / 20 | 57 | 35 |
| 76 | | 16 / 5 | 46 / 55 | 57 | 54 |
| 77 | | 22 / 5 | 41 / 29 | 58 | 11 |
| 78 | | 28 / 5 | 10 / 4 | 58 | 27 |
| 79 | | 33 / 4 | 24 / 37 | 58 | 41 |
| 80 | | 37 / 4 | 51 / 12 | 58 | 55 |
| 81 | | 42 / 3 | 3 / 54 | 59 | 8 |
| 82 | | 45 / 3 | 48 / 20 | 59 | 19 |
| 83 | | 49 / 2 | 8 / 43 | 59 | 28 |
| 84 | | 52 / 2 | 1 / 26 | 59 | 36 |
| 85 | | 54 / 2 | 27 / 0 | 59 | 44 |
| 86 | | 56 / 1 | 27 / 33 | 59 | 49 |
| 87 | | 58 / 1 | 0 / 7 | 59 | 54 |
| 88 | 22 | 59 / 0 | 7 / 39 | 59 | 57 |
| 89 | 22 | 59 / 0 | 46 / 14 | 59 | 59 |
| 90 | 23 | 0 / 0 | 0 / 0 | 60 | 0 |

| | Arcus | | | dia | | | Arcus | | | dia | | | Arcus | | | dia | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G | M | Z | M | Z | | G | M | Z | M | Z | | G | M | Z | M | Z |
| 1 | 0 | 24<br>34 | 24<br>34 | 0 | 57 | 31 | 12 | 5<br>21 | 32<br>18 | 28 | 47 | 61 | 20 | 50<br>12 | 20<br>28 | 51 | 14 |
| 2 | 0 | 48<br>34 | 48<br>33 | 1 | 54 | 32 | | 26<br>21 | 50<br>6 | 29 | 39 | 62 | 21 | 2<br>12 | 28<br>5 | 51 | 48 |
| 3 | 1 | 13<br>34 | 11<br>22 | 2 | 52 | 33 | 12 | 47<br>20 | 56<br>52 | 30 | 31 | 63 | | 14<br>11 | 43<br>41 | 52 | 21 |
| 4 | 1 | 37<br>34 | 33<br>21 | 3 | 49 | 34 | 13 | 8<br>20 | 48<br>40 | 31 | 23 | 64 | | 26<br>11 | 34<br>18 | 52 | 53 |
| 5 | 2 | 1<br>34 | 44<br>18 | 4 | 45 | 35 | | 29<br>20 | 28<br>27 | 32 | 14 | 65 | | 37<br>10 | 52<br>53 | 53 | 24 |
| 6 | | 26<br>34 | 12<br>16 | 5 | 43 | 36 | 13 | 49<br>20 | 55<br>13 | 33 | 5 | 66 | | 48<br>10 | 44<br>30 | 53 | 54 |
| 7 | 2 | 50<br>34 | 28<br>14 | 6 | 40 | 37 | 14 | 10<br>19 | 8<br>49 | 33 | 56 | 67 | 21 | 59<br>10 | 15<br>4 | 54 | 22 |
| 8 | 3 | 14<br>34 | 44<br>11 | 7 | 37 | 38 | | 30<br>19 | 7<br>44 | 34 | 46 | 68 | 22 | 9<br>9 | 19<br>40 | 54 | 51 |
| 9 | 3 | 38<br>34 | 45<br>7 | 8 | 34 | 39 | 14 | 49<br>19 | 52<br>29 | 35 | 35 | 69 | | 18<br>9 | 59<br>15 | 55 | 17 |
| 10 | 4 | 3<br>34 | 0<br>4 | 9 | 31 | 40 | 15 | 9<br>19 | 21<br>15 | 36 | 25 | 70 | | 28<br>8 | 14<br>49 | 55 | 42 |
| 11 | | 27<br>34 | 4<br>0 | 10 | 27 | 41 | | 28<br>18 | 36<br>58 | 37 | 13 | 71 | | 37<br>8 | 3<br>23 | 56 | 7 |
| 12 | 4 | 51<br>33 | 4<br>54 | 11 | 23 | 42 | 15 | 47<br>18 | 34<br>43 | 38 | 2 | 72 | | 46<br>7 | 26<br>57 | 56 | 30 |
| 13 | 5 | 14<br>33 | 59<br>50 | 12 | 20 | 43 | 16 | 6<br>18 | 17<br>26 | 38 | 49 | 73 | 22 | 53<br>7 | 22<br>32 | 56 | 54 |
| 14 | 5 | 38<br>33 | 49<br>45 | 13 | 17 | 44 | | 24<br>18 | 43<br>10 | 39 | 37 | 74 | 23 | 0<br>7 | 55<br>6 | 57 | 14 |
| 15 | 6 | 2<br>33 | 34<br>40 | 14 | 13 | 45 | 16 | 42<br>17 | 53<br>52 | 40 | 23 | 75 | | 8<br>6 | 1<br>39 | 57 | 33 |
| 16 | | 26<br>33 | 14<br>33 | 15 | 8 | 46 | 17 | 0<br>17 | 45<br>34 | 41 | 9 | 76 | | 14<br>6 | 40<br>12 | 57 | 51 |
| 17 | 6 | 49<br>33 | 47<br>27 | 16 | 4 | 47 | | 18<br>17 | 20<br>17 | 41 | 54 | 77 | | 20<br>5 | 55<br>24 | 58 | 10 |
| 18 | 7 | 13<br>33 | 14<br>20 | 17 | 0 | 48 | | 35<br>16 | 37<br>58 | 42 | 39 | 78 | | 26<br>5 | 37<br>18 | 58 | 26 |
| 19 | | 36<br>33 | 34<br>13 | 17 | 56 | 49 | 17 | 52<br>16 | 35<br>41 | 43 | 24 | 79 | | 31<br>4 | 55<br>51 | 58 | 41 |
| 20 | 7 | 59<br>3 | 41<br>6 | 18 | 52 | 50 | 18 | 9<br>16 | 16<br>20 | 44 | 6 | 80 | | 36<br>4 | 46<br>24 | 58 | 56 |
| 21 | 8 | 22<br>22 | 43<br>57 | 19 | 47 | 51 | | 25<br>16 | 36<br>2 | 44 | 50 | 81 | | 41<br>3 | 11<br>56 | 59 | 7 |
| 22 | 8 | 45<br>22 | 50<br>50 | 20 | 43 | 52 | | 41<br>15 | 38<br>42 | 45 | 33 | 82 | | 46<br>3 | 7<br>29 | 59 | 18 |
| 23 | 9 | 8<br>22 | 40<br>41 | 21 | 37 | 53 | 18 | 57<br>15 | 20<br>22 | 46 | 13 | 83 | | 48<br>3 | 36<br>1 | 59 | 28 |
| 24 | | 31<br>22 | 21<br>31 | 22 | 31 | 54 | 19 | 12<br>15 | 42<br>1 | 46 | 53 | 84 | | 51<br>2 | 37<br>34 | 59 | 37 |
| 25 | 9 | 43<br>22 | 52<br>23 | 23 | 27 | 55 | | 27<br>14 | 43<br>40 | 47 | 33 | 85 | | 54<br>2 | 11<br>5 | 59 | 44 |
| 26 | 10 | 16<br>22 | 15<br>12 | 24 | 20 | 56 | | 42<br>14 | 33<br>20 | 48 | 12 | 86 | | 56<br>1 | 16<br>38 | 59 | 50 |
| 27 | 10 | 38<br>22 | 27<br>3 | 25 | 14 | 57 | 19 | 56<br>13 | 43<br>57 | 48 | 50 | 87 | | 57<br>1 | 54<br>10 | 59 | 55 |
| 28 | 11 | 0<br>21 | 30<br>43 | 26 | 7 | 58 | 20 | 10<br>13 | 40<br>36 | 49 | 27 | 88 | | 59<br>0 | 4<br>54 | 59 | 57 |
| 29 | | 22<br>21 | 23<br>39 | 27 | 1 | 59 | | 24<br>13 | 16<br>13 | 50 | 3 | 89 | 23 | 59<br>0 | 46<br>14 | 60 | 1 |
| 30 | 11 | 44<br>21 | 2<br>30 | 27 | 56 | 60 | | 37<br>12 | 29<br>51 | 50 | 39 | 90 | 24 | 0<br>0 | 0<br>0 | 60 | 0 |

# 25

| | Ascens. dia | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 1 | 0 | 25 / 25 | 21 / 21 | 0 | 57 |
| 2 | 0 | 50 / 25 | 42 / 21 | 1 | 59 |
| 3 | 1 | 16 / 25 | 3 / 19 | 2 | 50 |
| 4 | 1 | 41 / 25 | 22 / 17 | 3 | 46 |
| 5 | 2 | 6 / 25 | 39 / 16 | 4 | 44 |
| 6 | 2 | 31 / 25 | 55 / 13 | 5 | 40 |
| 7 | 2 | 57 / 25 | 8 / 11 | 6 | 37 |
| 8 | 3 | 22 / 25 | 19 / 8 | 7 | 33 |
| 9 | 3 | 47 / 25 | 27 / 4 | 8 | 29 |
| 10 | 4 | 12 / 25 | 31 / 4 | 9 | 26 |
| 11 | 4 | 37 / 24 | 31 / 56 | 10 | 22 |
| 12 | 5 | 2 / 24 | 27 / 52 | 11 | 19 |
| 13 | 5 | 27 / 24 | 19 / 47 | 12 | 14 |
| 14 | 5 | 52 / 24 | 6 / 47 | 13 | 10 |
| 15 | 6 | 16 / 24 | 47 / 39 | 14 | 6 |
| 16 | 6 | 41 / 24 | 22 / 39 | 15 | 2 |
| 17 | 7 | 5 / 24 | 51 / 33 | 15 | 58 |
| 18 | 7 | 30 / 24 | 10 / 16 | 16 | 54 |
| 19 | 7 | 54 / 24 | 30 / 9 | 17 | 49 |
| 20 | 8 | 18 / 24 | 39 / 7 | 18 | 43 |
| 21 | 8 | 42 / 23 | 40 / 43 | 19 | 38 |
| 22 | 9 | 6 / 23 | 33 / 44 | 20 | 33 |
| 23 | 9 | 30 / 23 | 17 / 44 | 21 | 28 |
| 24 | 9 | 53 / 23 | 52 / 21 | 22 | 23 |
| 25 | 10 | 17 / 23 | 19 / 16 | 23 | 16 |
| 26 | 10 | 40 / 23 | 39 / 6 | 24 | 12 |
| 27 | 11 | 3 / 22 | 41 / 56 | 25 | 6 |
| 28 | 11 | 26 / 22 | 37 / 47 | 25 | 59 |
| 29 | 11 | 49 / 22 | 24 / 34 | 26 | 50 |
| 30 | 12 | 11 / 22 | 58 / 21 | 27 | 43 |
| 31 | 12 | 34 / 22 | 19 / 10 | 28 | 37 |
| 32 | 12 | 56 / 21 | 29 / 52 | 29 | 29 |
| 33 | 13 | 18 / 21 | 27 / 44 | 30 | 20 |
| 34 | 13 | 40 / 21 | 11 / 32 | 31 | 12 |
| 35 | 14 | 1 / 21 | 43 / 17 | 32 | 3 |
| 36 | 14 | 23 / 21 | 0 / 4 | 32 | 54 |
| 37 | 14 | 44 / 20 | 4 / 49 | 33 | 44 |
| 38 | 15 | 4 / 20 | 53 / 34 | 34 | 33 |
| 39 | 15 | 25 / 20 | 27 / 19 | 35 | 24 |
| 40 | 15 | 45 / 20 | 46 / 3 | 36 | 13 |
| 41 | 16 | 5 / 19 | 49 / 41 | 37 | 2 |
| 42 | 16 | 25 / 19 | 36 / 50 | 37 | 50 |
| 43 | 16 | 45 / 19 | 6 / 14 | 38 | 38 |
| 44 | 17 | 4 / 18 | 20 / 46 | 39 | 26 |
| 45 | 17 | 23 / 18 | 10 / 38 | 40 | 12 |
| 46 | 17 | 41 / 18 | 44 / 51 | 40 | 58 |
| 47 | 18 | 0 / 18 | 14 / 2 | 41 | 45 |
| 48 | 18 | 18 / 17 | 16 / 42 | 42 | 29 |
| 49 | 18 | 35 / 17 | 59 / 23 | 43 | 13 |
| 50 | 18 | 53 / 17 | 22 / 4 | 43 | 58 |
| 51 | 19 | 10 / 16 | 26 / 44 | 44 | 40 |
| 52 | 19 | 27 / 16 | 10 / 23 | 45 | 32 |
| 53 | 19 | 43 / 16 | 33 / 2 | 46 | 3 |
| 54 | 19 | 59 / 15 | 34 / 41 | 46 | 44 |
| 55 | 20 | 14 / 14 | 16 / 19 | 47 | 24 |
| 56 | 20 | 30 / 14 | 35 / 48 | 48 | 4 |
| 57 | 20 | 44 / 14 | 33 / 34 | 48 | 42 |
| 58 | 21 | 0 / 14 | 7 / 12 | 49 | 20 |
| 59 | 21 | 14 / 13 | 19 / 59 | 49 | 57 |
| 60 | 21 | 28 / 13 | 8 / 26 | 50 | 35 |
| 61 | 21 | 41 / 13 | 34 / 2 | 51 | 8 |
| 62 | 21 | 54 / 12 | 36 / 38 | 51 | 42 |
| 63 | 22 | 7 / 12 | 14 / 13 | 52 | 15 |
| 64 | 22 | 19 / 11 | 27 / 49 | 52 | 47 |
| 65 | 22 | 31 / 11 | 16 / 23 | 53 | 18 |
| 66 | 22 | 42 / 10 | 39 / 48 | 53 | 48 |
| 67 | 22 | 53 / 10 | 37 / 33 | 54 | 17 |
| 68 | 23 | 4 / 10 | 10 / 6 | 54 | 45 |
| 69 | 23 | 14 / 9 | 16 / 40 | 55 | 12 |
| 70 | 23 | 23 / 9 | 56 / 10 | 55 | 38 |
| 71 | 23 | 33 / 8 | 10 / 26 | 56 | 4 |
| 72 | 23 | 41 / 8 | 56 / 21 | 56 | 28 |
| 73 | 23 | 50 / 7 | 17 / 52 | 56 | 50 |
| 74 | 23 | 58 / 7 | 0 / 25 | 57 | 12 |
| 75 | 24 | 5 / 6 | 34 / 57 | 57 | 32 |
| 76 | 24 | 12 / 6 | 31 / 31 | 57 | 51 |
| 77 | | 19 / 6 | 2 / 1 | 58 | 7 |
| 78 | | 25 / 5 | 3 / 33 | 58 | 25 |
| 79 | | 30 / 5 | 36 / 6 | 58 | 40 |
| 80 | | 35 / 4 | 42 / 36 | 58 | 53 |
| 81 | | 40 / 4 | 18 / 7 | 59 | 5 |
| 82 | | 44 / 3 | 25 / 39 | 59 | 17 |
| 83 | | 48 / 3 | 4 / 10 | 59 | 27 |
| 84 | | 51 / 2 | 14 / 49 | 59 | 36 |
| 85 | | 53 / 2 | 59 / 11 | 59 | 43 |
| 86 | | 56 / 1 | 6 / 53 | 59 | 49 |
| 87 | | 57 / 1 | 48 / 42 | 59 | 53 |
| 88 | 24 | 59 / 0 | 1 / 54 | 59 | 58 |
| 89 | 24 | 59 / 0 | 46 / 14 | 59 | 59 |
| 90 | 25 | 0 / 0 | 0 / 0 | 60 | 0 |

| | Azimut | | | | | Diff | |
|---|---|---|---|---|---|---|---|
| | G | M | S | | | M | S |
| 1 | 0 | 26 | 18 | 26 | 18 | 0 | 56 |
| 2 | 0 | 52 | 36 | 26 | 17 | 1 | 52 |
| 3 | 1 | 18 | 53 | 26 | 15 | 2 | 48 |
| 4 | 1 | 45 | 8 | 26 | 15 | 3 | 44 |
| 5 | 2 | 11 | 23 | 26 | 12 | 4 | 41 |
| 6 | 2 | 37 | 35 | 26 | 10 | 5 | 37 |
| 7 | 3 | 3 | 45 | 26 | 7 | 6 | 33 |
| 8 | 3 | 29 | 52 | 26 | 4 | 7 | 29 |
| 9 | 3 | 55 | 56 | 26 | 1 | 8 | 25 |
| 10 | 4 | 21 | 57 | 25 | 56 | 9 | 21 |
| 11 | 4 | 47 | 53 | 25 | 53 | 10 | 17 |
| 12 | 5 | 13 | 46 | 25 | 47 | 11 | 12 |
| 13 | 5 | 39 | 33 | 25 | 43 | 12 | 9 |
| 14 | 6 | 5 | 16 | 25 | 37 | 13 | 4 |
| 15 | 6 | 30 | 53 | 25 | 31 | 13 | 59 |
| 16 | 6 | 56 | 24 | 25 | 25 | 14 | 54 |
| 17 | 7 | 21 | 49 | 25 | 19 | 15 | 50 |
| 18 | 7 | 47 | 8 | 25 | 11 | 16 | 44 |
| 19 | 8 | 12 | 19 | 25 | 3 | 17 | 40 |
| 20 | 8 | 37 | 22 | 24 | 56 | 18 | 35 |
| 21 | 9 | 2 | 18 | 24 | 48 | 19 | 30 |
| 22 | 9 | 27 | 6 | 24 | 39 | 20 | 24 |
| 23 | 9 | 51 | 45 | 24 | 30 | 21 | 19 |
| 24 | 10 | 16 | 15 | 24 | 20 | 22 | 12 |
| 25 | 10 | 40 | 35 | 24 | 12 | 23 | 6 |
| 26 | 11 | 4 | 47 | 24 | 0 | 24 | 0 |
| 27 | 11 | 28 | 47 | 23 | 49 | 24 | 53 |
| 28 | 11 | 52 | 36 | 23 | 38 | 25 | 47 |
| 29 | 12 | 16 | 14 | 23 | 27 | 26 | 40 |
| 30 | 12 | 39 | 41 | 23 | 15 | 27 | 32 |
| 31 | 13 | 2 | 56 | 23 | 2 | 28 | 24 |
| 32 | 13 | 25 | 58 | 22 | 49 | 29 | 17 |
| 33 | 13 | 48 | 47 | 22 | 36 | 30 | 9 |
| 34 | 14 | 11 | 23 | 22 | 23 | 31 | 1 |
| 35 | 14 | 33 | 46 | 22 | 8 | 31 | 51 |
| 36 | 14 | 55 | 54 | 21 | 54 | 32 | 43 |
| 37 | 15 | 17 | 48 | 21 | 38 | 33 | 33 |
| 38 | 15 | 39 | 26 | 21 | 25 | 34 | 24 |
| 39 | 16 | 0 | 51 | 21 | 8 | 35 | 13 |
| 40 | 16 | 21 | 59 | 20 | 52 | 36 | 2 |
| 41 | 16 | 42 | 51 | 20 | 35 | 36 | 50 |
| 42 | 17 | 3 | 26 | 20 | 18 | 37 | 39 |
| 43 | 17 | 23 | 44 | 20 | 2 | 38 | 27 |
| 44 | 17 | 43 | 46 | 19 | 43 | 39 | 14 |
| 45 | 18 | 3 | 28 | 19 | 24 | 40 | 0 |
| 46 | 18 | 22 | 52 | 19 | 5 | 40 | 48 |
| 47 | 18 | 41 | 57 | 18 | 48 | 41 | 34 |
| 48 | 19 | 0 | 45 | 18 | 27 | 42 | 17 |
| 49 | 19 | 19 | 12 | 18 | 8 | 43 | 2 |
| 50 | 19 | 37 | 20 | 17 | 46 | 43 | 44 |
| 51 | 19 | 55 | 6 | 17 | 26 | 44 | 29 |
| 52 | 20 | 12 | 32 | 17 | 4 | 45 | 12 |
| 53 | 20 | 29 | 36 | 16 | 43 | 45 | 54 |
| 54 | 20 | 46 | 19 | 16 | 21 | 46 | 35 |
| 55 | 21 | 2 | 40 | 15 | 59 | 47 | 15 |
| 56 | 21 | 18 | 39 | 15 | 36 | 47 | 55 |
| 57 | 21 | 34 | 15 | 15 | 12 | 48 | 33 |
| 58 | 21 | 49 | 27 | 14 | 49 | 49 | 12 |
| 59 | 22 | 4 | 16 | 14 | 25 | 49 | 49 |
| 60 | 22 | 18 | 41 | 14 | 1 | 50 | 25 |
| 61 | 22 | 32 | 42 | 13 | 36 | 51 | 1 |
| 62 | 22 | 46 | 18 | 13 | 11 | 51 | 34 |
| 63 | 22 | 59 | 29 | 12 | 45 | 52 | 8 |
| 64 | 23 | 12 | 14 | 12 | 20 | 52 | 40 |
| 65 | 23 | 24 | 34 | 11 | 53 | 53 | 12 |
| 66 | 23 | 36 | 27 | 11 | 27 | 53 | 44 |
| 67 | 23 | 47 | 54 | 11 | 1 | 54 | 14 |
| 68 | 23 | 58 | 55 | 10 | 33 | 54 | 42 |
| 69 | 24 | 9 | 28 | 10 | 6 | 55 | 10 |
| 70 | | 19 | 34 | 9 | 40 | 55 | 36 |
| 71 | | 29 | 14 | 9 | 10 | 56 | 0 |
| 72 | | 38 | 24 | 8 | 43 | 56 | 24 |
| 73 | | 47 | 7 | 8 | 14 | 56 | 47 |
| 74 | 24 | 55 | 21 | 7 | 45 | 57 | 8 |
| 75 | 25 | 3 | 6 | 7 | 16 | 57 | 28 |
| 76 | 25 | 10 | 22 | 6 | 47 | 57 | 48 |
| 77 | | 17 | 9 | 6 | 19 | 58 | 7 |
| 78 | | 23 | 28 | 5 | 48 | 58 | 22 |
| 79 | | 29 | 16 | 5 | 19 | 58 | 38 |
| 80 | | 34 | 35 | 4 | 48 | 58 | 51 |
| 81 | | 39 | 23 | 4 | 19 | 59 | 5 |
| 82 | | 43 | 42 | 3 | 49 | 59 | 16 |
| 83 | | 47 | 31 | 3 | 19 | 59 | 26 |
| 84 | | 50 | 50 | 2 | 48 | 59 | 34 |
| 85 | | 53 | 38 | 2 | 17 | 59 | 42 |
| 86 | | 55 | 55 | 1 | 47 | 59 | 49 |
| 87 | | 57 | 42 | 1 | 17 | 59 | 54 |
| 88 | 25 | 58 | 59 | 0 | 46 | 59 | 57 |
| 89 | 25 | 59 | 45 | 0 | 15 | 59 | 59 |
| 90 | 26 | 0 | 0 | 0 | 0 | 60 | 0 |

# 27

| | Arcus diei G | M | S | M | S | M | S |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 27 | 14 | 27 | 14 | 0 | 56 |
| 2 | 0 | 54 | 28 | 27 | 13 | 1 | 52 |
| 3 | 1 | 21 | 41 | 27 | 12 | 2 | 48 |
| 4 | 1 | 48 | 53 | 27 | 11 | 3 | 43 |
| 5 | 2 | 16 | 4 | 27 | 8 | 4 | 38 |
| 6 | 2 | 43 | 12 | 27 | 6 | 5 | 34 |
| 7 | 3 | 10 | 18 | 27 | 3 | 6 | 30 |
| 8 | 3 | 37 | 21 | 27 | 0 | 7 | 26 |
| 9 | 4 | 4 | 21 | 26 | 57 | 8 | 21 |
| 10 | 4 | 31 | 18 | 26 | 52 | 9 | 16 |
| 11 | 4 | 58 | 10 | 26 | 48 | 10 | 12 |
| 12 | 5 | 24 | 58 | 26 | 44 | 11 | 7 |
| 13 | 5 | 51 | 42 | 26 | 38 | 12 | 2 |
| 14 | 6 | 18 | 20 | 26 | 32 | 12 | 57 |
| 15 | 6 | 44 | 52 | 26 | 27 | 13 | 53 |
| 16 | 7 | 11 | 19 | 26 | 20 | 14 | 48 |
| 17 | 7 | 37 | 39 | 26 | 13 | 15 | 42 |
| 18 | 8 | 3 | 52 | 26 | 7 | 16 | 37 |
| 19 | 8 | 29 | 59 | 25 | 58 | 17 | 31 |
| 20 | 8 | 55 | 57 | 25 | 51 | 18 | 26 |
| 21 | 9 | 21 | 48 | 25 | 42 | 19 | 21 |
| 22 | 9 | 47 | 30 | 25 | 34 | 20 | 14 |
| 23 | 10 | 13 | 4 | 25 | 23 | 21 | 8 |
| 24 | 10 | 38 | 27 | 25 | 14 | 22 | 3 |
| 25 | 11 | 3 | 41 | 25 | 6 | 22 | 56 |
| 26 | 11 | 28 | 47 | 24 | 53 | 23 | 49 |
| 27 | 11 | 53 | 40 | 24 | 43 | 24 | 43 |
| 28 | 12 | 18 | 23 | 24 | 31 | 25 | 36 |
| 29 | 12 | 42 | 54 | 24 | 19 | 26 | 28 |
| 30 | 13 | 7 | 13 | 24 | 7 | 27 | 21 |
| 31 | 13 | 31 | 20 | 23 | 44 | 28 | 14 |
| 32 | 13 | 55 | 4 | 23 | 41 | 29 | 5 |
| 33 | 14 | 18 | 46 | 23 | 28 | 29 | 57 |
| 34 | 14 | 42 | 14 | 23 | 13 | 30 | 48 |
| 35 | 15 | 5 | 27 | 23 | 0 | 31 | 40 |
| 36 | 15 | 28 | 27 | 22 | 44 | 32 | 30 |
| 37 | 15 | 51 | 11 | 22 | 29 | 33 | 21 |
| 38 | 16 | 13 | 40 | 22 | 14 | 34 | 11 |
| 39 | 16 | 36 | 4 | 21 | 57 | 35 | 0 |
| 40 | 16 | 58 | 1 | 21 | 40 | 35 | 49 |
| 41 | 17 | 19 | 41 | 21 | 24 | 36 | 37 |
| 42 | 17 | 41 | 5 | 21 | 6 | 37 | 26 |
| 43 | 18 | 2 | 11 | 20 | 49 | 38 | 14 |
| 44 | 18 | 23 | 0 | 20 | 28 | 39 | 1 |
| 45 | 18 | 43 | 28 | 20 | 12 | 39 | 48 |
| 46 | 19 | 3 | 40 | 19 | 51 | 40 | 34 |
| 47 | 19 | 23 | 31 | 19 | 31 | 41 | 22 |
| 48 | 19 | 43 | 2 | 19 | 12 | 42 | 7 |
| 49 | 20 | 2 | 14 | 18 | 51 | 42 | 51 |
| 50 | 20 | 21 | 5 | 18 | 30 | 43 | 34 |
| 51 | 20 | 39 | 35 | 18 | 9 | 44 | 19 |
| 52 | 20 | 57 | 44 | 17 | 46 | 45 | 1 |
| 53 | 21 | 15 | 30 | 17 | 24 | 45 | 43 |
| 54 | 21 | 32 | 54 | 17 | 1 | 46 | 24 |
| 55 | 21 | 49 | 55 | 16 | 59 | 47 | 6 |
| 56 | 22 | 6 | 54 | 16 | 14 | 47 | 44 |
| 57 | 22 | 22 | 48 | 14 | 11 | 48 | 24 |
| 58 | 22 | 38 | 59 | 14 | 26 | 49 | 2 |
| 59 | 22 | 54 | 4 | 14 | 1 | 49 | 40 |
| 60 | 23 | 9 | 6 | 12 | 36 | 50 | 17 |
| 61 | 23 | 25 | 42 | 12 | 10 | 50 | 53 |
| 62 | 23 | 37 | 52 | 13 | 44 | 51 | 28 |
| 63 | 23 | 51 | 37 | 13 | 28 | 52 | 2 |
| 64 | 24 | 5 | 5 | 12 | 42 | 52 | 36 |
| 65 | 24 | 17 | 47 | 12 | 24 | 53 | 7 |
| 66 | 24 | 30 | 11 | 11 | 57 | 53 | 38 |
| 67 | 24 | 42 | 8 | 11 | 29 | 54 | 7 |
| 68 | 24 | 53 | 37 | 11 | 1 | 54 | 36 |
| 69 | 25 | 4 | 38 | 10 | 32 | 55 | 4 |
| 70 | 25 | 15 | 10 | 10 | 4 | 55 | 30 |
| 71 | 25 | 25 | 14 | 9 | 34 | 55 | 55 |
| 72 | 25 | 34 | 48 | 9 | 6 | 56 | 20 |
| 73 | 25 | 43 | 54 | 8 | 51 | 56 | 43 |
| 74 | 25 | 52 | 45 | 8 | 6 | 57 | 5 |
| 75 | 26 | 0 | 51 | 7 | 19 | 57 | 26 |
| 76 | 26 | 8 | 10 | 7 | 5 | 57 | 46 |
| 77 | | 15 | 15 | 6 | 35 | 58 | 4 |
| 78 | | 21 | 50 | 6 | 4 | 58 | 21 |
| 79 | | 27 | 54 | 5 | 32 | 58 | 36 |
| 80 | | 33 | 26 | 5 | 2 | 58 | 51 |
| 81 | | 38 | 28 | 4 | 30 | 59 | 4 |
| 82 | | 42 | 58 | 3 | 59 | 59 | 16 |
| 83 | | 46 | 57 | 3 | 27 | 59 | 26 |
| 84 | | 50 | 24 | 2 | 56 | 59 | 34 |
| 85 | | 53 | 20 | 2 | 24 | 59 | 43 |
| 86 | | 55 | 44 | 1 | 52 | 59 | 49 |
| 87 | | 57 | 36 | 1 | 20 | 59 | 53 |
| 88 | 26 | 58 | 56 | 0 | 48 | 59 | 57 |
| 89 | 26 | 59 | 44 | 0 | 16 | 59 | 59 |
| 90 | 27 | 0 | 0 | 0 | 0 | 60 | 0 |

| | Arcus | Dia | | | | | Arcus | Dia | | | | | Arcus | Dia | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G | M | S | M | S | | G | M | S | M | S | | G | M | S | M | S |
| 1 | 0 | 38 / 38 | 10 / 10 | 0 | 55 | 31 | 13 | 59 / 34 | 34 / 46 | 28 | 0 | 61 | 24 | 14 / 14 | 35 / 44 | 50 | 44 |
| 2 | 0 | 46 / 38 | 20 / 9 | 1 | 50 | 32 | 14 | 24 / 34 | 20 / 33 | 28 | 53 | 62 | 24 | 20 / 14 | 20 / 19 | 51 | 21 |
| 3 | 1 | 34 / 38 | 29 / 7 | 2 | 45 | 33 | 14 | 48 / 34 | 53 / 19 | 29 | 44 | 63 | 24 | 43 / 13 | 39 / 11 | 51 | 51 |
| 4 | 1 | 52 / 38 | 36 / 6 | 3 | 41 | 34 | 15 | 13 / 34 | 12 / 5 | 30 | 36 | 64 | 24 | 57 / 13 | 30 / 34 | 52 | 28 |
| 5 | 2 | 20 / 38 | 43 / 4 | 4 | 36 | 35 | 15 | 37 / 33 | 17 / 40 | 31 | 26 | 65 | 25 | 10 / 12 | 54 / 55 | 53 | 0 |
| 6 | 2 | 48 / 38 | 46 / 2 | 5 | 31 | 36 | 16 | 1 / 33 | 7 / 35 | 32 | 17 | 66 | 25 | 33 / 12 | 49 / 36 | 53 | 31 |
| 7 | 3 | 16 / 37 | 48 / 59 | 6 | 26 | 37 | 16 | 24 / 33 | 42 / 19 | 33 | 7 | 67 | 25 | 57 / 11 | 14 / 58 | 54 | 2 |
| 8 | 3 | 44 / 37 | 47 / 55 | 7 | 21 | 38 | 16 | 48 / 33 | 1 / 3 | 33 | 57 | 68 | 25 | 48 / 11 | 13 / 59 | 54 | 31 |
| 9 | 4 | 12 / 37 | 43 / 52 | 8 | 16 | 39 | 17 | 11 / 32 | 4 / 46 | 34 | 41 | 69 | 25 | 59 / 10 | 42 / 48 | 54 | 48 |
| 10 | 4 | 40 / 37 | 34 / 48 | 9 | 11 | 40 | 17 | 34 / 32 | 40 / 30 | 35 | 31 | 70 | 26 | 10 / 10 | 40 / 39 | 55 | 26 |
| 11 | 5 | 8 / 37 | 23 / 43 | 10 | 6 | 41 | 17 | 56 / 32 | 20 / 11 | 36 | 24 | 71 | 26 | 21 / 9 | 9 / 49 | 55 | 52 |
| 12 | 5 | 36 / 37 | 14 / 39 | 11 | 1 | 42 | 18 | 18 / 31 | 51 / 49 | 37 | 14 | 72 | 26 | 31 / 9 | 8 / 29 | 56 | 17 |
| 13 | 6 | 3 / 37 | 44 / 33 | 11 | 56 | 43 | 18 | 40 / 31 | 26 / 36 | 38 | 3 | 73 | 26 | 40 / 8 | 37 / 47 | 56 | 40 |
| 14 | 6 | 31 / 37 | 17 / 28 | 12 | 51 | 44 | 19 | 2 / 31 | 1 / 17 | 38 | 40 | 74 | 26 | 49 / 8 | 34 / 27 | 57 | 2 |
| 15 | 6 | 58 / 37 | 45 / 22 | 13 | 45 | 45 | 19 | 23 / 30 | 18 / 57 | 39 | 37 | 75 | 26 | 58 / 7 | 1 / 55 | 57 | 23 |
| 16 | 7 | 26 / 37 | 7 / 14 | 14 | 39 | 46 | 19 | 44 / 30 | 14 / 38 | 40 | 23 | 76 | 27 | 5 / 7 | 46 / 23 | 57 | 42 |
| 17 | 7 | 53 / 37 | 21 / 8 | 15 | 34 | 47 | 20 | 4 / 30 | 43 / 16 | 41 | 8 | 77 | 27 | 13 / 6 | 19 / 42 | 58 | 2 |
| 18 | 8 | 20 / 37 | 29 / 1 | 16 | 29 | 48 | 20 | 24 / 19 | 9 / 46 | 41 | 54 | 78 | 27 | 20 / 6 | 11 / 19 | 58 | 19 |
| 19 | 8 | 47 / 36 | 30 / 53 | 17 | 23 | 49 | 20 | 44 / 19 | 5 / 35 | 43 | 40 | 79 | 27 | 26 / 5 | 30 / 27 | 58 | 34 |
| 20 | 9 | 14 / 36 | 23 / 46 | 18 | 17 | 50 | 21 | 4 / 19 | 40 / 14 | 43 | 24 | 80 | 27 | 33 / 5 | 17 / 15 | 58 | 50 |
| 21 | 9 | 41 / 36 | 9 / 35 | 19 | 10 | 51 | 21 | 23 / 18 | 54 / 51 | 44 | 7 | 81 | 27 | 37 / 4 | 33 / 42 | 59 | 2 |
| 22 | 10 | 7 / 36 | 44 / 28 | 20 | 5 | 52 | 21 | 43 / 18 | 44 / 28 | 44 | 50 | 82 | 27 | 42 / 4 | 14 / 9 | 59 | 14 |
| 23 | 10 | 34 / 36 | 12 / 18 | 20 | 58 | 53 | 22 | 1 / 18 | 13 / 6 | 45 | 33 | 83 | 27 | 46 / 3 | 33 / 36 | 59 | 25 |
| 24 | 11 | 0 / 36 | 30 / 7 | 21 | 53 | 54 | 22 | 19 / 17 | 19 / 43 | 46 | 14 | 84 | 27 | 49 / 3 | 59 / 4 | 59 | 35 |
| 25 | 11 | 26 / 35 | 37 / 59 | 22 | 47 | 55 | 22 | 37 / 17 | 1 / 18 | 46 | 55 | 85 | 27 | 53 / 2 | 3 / 30 | 59 | 44 |
| 26 | 11 | 52 / 35 | 36 / 47 | 23 | 38 | 56 | 22 | 54 / 16 | 19 / 54 | 47 | 36 | 86 | 27 | 55 / 1 | 33 / 56 | 59 | 48 |
| 27 | 12 | 18 / 35 | 33 / 36 | 24 | 31 | 57 | 23 | 11 / 16 | 13 / 28 | 48 | 14 | 87 | 27 | 57 / 1 | 29 / 24 | 59 | 54 |
| 28 | 12 | 43 / 35 | 49 / 33 | 25 | 23 | 58 | 23 | 27 / 16 | 41 / 2 | 48 | 52 | 88 | 27 | 58 / 0 | 43 / 50 | 59 | 56 |
| 29 | 13 | 9 / 35 | 22 / 12 | 26 | 17 | 59 | 23 | 43 / 14 | 44 / 38 | 49 | 32 | 89 | 27 | 59 / 0 | 53 / 17 | 59 | 59 |
| 30 | 13 | 34 / 35 | 34 / 0 | 27 | 9 | 60 | 23 | 59 / 14 | 33 / 12 | 50 | 10 | 90 | 28 | 0 / 0 | 0 / 0 | 60 | 0 |

# 29

| | Argū Dra | | | | | |
|---|---|---|---|---|---|---|
| | G | M | S | MS | | |
| 1 | 0 | 29 / 29 | 5 / 5 | 0 | 55 | |
| 2 | 0 | 58 / 29 | 10 / 4 | 1 | 50 | |
| 3 | 1 | 27 / 29 | 14 / 3 | 2 | 44 | |
| 4 | 1 | 56 / 29 | 17 / 1 | 3 | 39 | |
| 5 | 2 | 25 / 28 | 18 / 59 | 4 | 34 | |
| 6 | 2 | 55 / 28 | 17 / 57 | 5 | 28 | |
| 7 | 3 | 23 / 28 | 14 / 54 | 6 | 23 | |
| 8 | 3 | 52 / 28 | 8 / 50 | 7 | 17 | |
| 9 | 4 | 20 / 28 | 58 / 47 | 8 | 12 | |
| 10 | 4 | 49 / 28 | 55 / 43 | 9 | 6 | |
| 11 | 5 | 18 / 28 | 28 / 38 | 10 | 1 | |
| 12 | 5 | 47 / 28 | 6 / 34 | 10 | 55 | |
| 13 | 6 | 15 / 28 | 40 / 28 | 11 | 49 | |
| 14 | 6 | 44 / 28 | 8 / 22 | 12 | 43 | |
| 15 | 7 | 12 / 28 | 30 / 16 | 13 | 38 | |
| 16 | 7 | 40 / 28 | 46 / 9 | 14 | 32 | |
| 17 | 8 | 8 / 28 | 50 / 3 | 15 | 26 | |
| 18 | 8 | 36 / 27 | 48 / 55 | 16 | 20 | |
| 19 | 9 | 4 / 27 | 43 / 47 | 17 | 14 | |
| 20 | 9 | 32 / 27 | 40 / 39 | 18 | 7 | |
| 21 | 10 | 0 / 27 | 18 / 30 | 19 | 1 | |
| 22 | 10 | 27 / 27 | 47 / 21 | 19 | 54 | |
| 23 | 10 | 55 / 27 | 10 / 13 | 20 | 47 | |
| 24 | 11 | 22 / 27 | 23 / 1 | 21 | 39 | |
| 25 | 11 | 49 / 26 | 25 / 50 | 22 | 34 | |
| 26 | 12 | 16 / 26 | 14 / 40 | 23 | 27 | |
| 27 | 12 | 42 / 26 | 54 / 28 | 24 | 19 | |
| 28 | 13 | 9 / 26 | 22 / 17 | 25 | 12 | |
| 29 | 13 | 35 / 26 | 39 / 4 | 26 | 4 | |
| 30 | 14 | 1 / 25 | 43 / 51 | 26 | 56 | |

| | Argū Dra | | | | | |
|---|---|---|---|---|---|---|
| | G | M | S | MS | | |
| 31 | 14 | 27 / 25 | 34 / 39 | 27 | 49 | |
| 32 | 14 | 53 / 25 | 13 / 24 | 28 | 39 | |
| 33 | 15 | 18 / 25 | 37 / 11 | 29 | 31 | |
| 34 | 15 | 43 / 24 | 48 / 55 | 30 | 22 | |
| 35 | 16 | 8 / 24 | 43 / 41 | 31 | 13 | |
| 36 | 16 | 32 / 24 | 24 / 55 | 32 | 4 | |
| 37 | 16 | 57 / 24 | 49 / 9 | 32 | 54 | |
| 38 | 17 | 21 / 23 | 58 / 53 | 33 | 44 | |
| 39 | 17 | 45 / 23 | 51 / 36 | 34 | 34 | |
| 40 | 18 | 9 / 23 | 27 / 17 | 35 | 24 | |
| 41 | 18 | 32 / 23 | 44 / 1 | 36 | 14 | |
| 42 | 18 | 52 / 22 | 45 / 43 | 37 | 2 | |
| 43 | 19 | 16 / 22 | 28 / 23 | 37 | 48 | |
| 44 | 19 | 40 / 22 | 51 / 4 | 38 | 36 | |
| 45 | 20 | 2 / 21 | 55 / 43 | 39 | 22 | |
| 46 | 20 | 24 / 21 | 38 / 23 | 40 | 10 | |
| 47 | 20 | 46 / 21 | 1 / 2 | 40 | 46 | |
| 48 | 21 | 7 / 20 | 3 / 42 | 41 | 42 | |
| 49 | 21 | 27 / 20 | 45 / 19 | 42 | 27 | |
| 50 | 21 | 48 / 19 | 4 / 57 | 43 | 12 | |
| 51 | 22 | 8 / 19 | 1 / 34 | 43 | 55 | |
| 52 | 22 | 27 / 19 | 35 / 11 | 44 | 39 | |
| 53 | 22 | 46 / 18 | 46 / 47 | 45 | 22 | |
| 54 | 23 | 5 / 18 | 33 / 23 | 46 | 4 | |
| 55 | 23 | 23 / 17 | 56 / 59 | 46 | 45 | |
| 56 | 23 | 41 / 17 | 55 / 33 | 47 | 25 | |
| 57 | 23 | 59 / 17 | 28 / 7 | 48 | 6 | |
| 58 | 24 | 16 / 16 | 31 / 42 | 48 | 45 | |
| 59 | 24 | 33 / 16 | 17 / 16 | 49 | 23 | |
| 60 | 24 | 49 / 15 | 33 / 47 | 49 | 49 | |

| | Argū Dra | | | | | |
|---|---|---|---|---|---|---|
| | G | M | S | MS | | |
| 61 | 25 | 5 / 15 | 20 / 21 | 50 | 37 | |
| 62 | 25 | 20 / 14 | 41 / 53 | 51 | 12 | |
| 63 | 25 | 35 / 14 | 34 / 24 | 51 | 46 | |
| 64 | 25 | 49 / 13 | 58 / 55 | 52 | 20 | |
| 65 | 26 | 3 / 13 | 53 / 21 | 52 | 53 | |
| 66 | 26 | 17 / 12 | 20 / 57 | 53 | 24 | |
| 67 | 26 | 30 / 12 | 17 / 27 | 53 | 55 | |
| 68 | 26 | 42 / 11 | 44 / 56 | 54 | 25 | |
| 69 | 26 | 54 / 11 | 40 / 26 | 54 | 54 | |
| 70 | 27 | 6 / 10 | [illegible] / 55 | 55 | 21 | |
| 71 | 27 | 17 / 10 | 1 / 24 | 55 | 47 | |
| 72 | 27 | 27 / 9 | 25 / 52 | 56 | 12 | |
| 73 | 27 | 37 / 9 | 17 / 19 | 56 | 36 | |
| 74 | 27 | 46 / 8 | 36 / 48 | 56 | 59 | |
| 75 | 27 | 55 / 8 | 24 / 14 | 57 | 20 | |
| 76 | 28 | 3 / 7 | 28 / 43 | 57 | 42 | |
| 77 | 28 | 11 / 7 | 21 / 9 | 58 | 0 | |
| 78 | 28 | 18 / 6 | 30 / 35 | 58 | 18 | |
| 79 | 28 | 25 / 6 | 5 / 2 | 58 | 34 | |
| 80 | 28 | 31 / 5 | 7 / 27 | 58 | 49 | |
| 81 | 28 | 36 / 4 | 34 / 54 | 59 | 3 | |
| 82 | 28 | 41 / 4 | 28 / 20 | 59 | 15 | |
| 83 | 28 | 45 / 3 | 48 / 46 | 59 | 26 | |
| 84 | 28 | 49 / 3 | 34 / 10 | 59 | 34 | |
| 85 | 28 | 52 / 2 | 44 / 37 | 59 | 43 | |
| 86 | 28 | 55 / 2 | 21 / 2 | 59 | 49 | |
| 87 | 28 | 57 / 1 | 23 / 26 | 59 | 54 | |
| 88 | 28 | 58 / 0 | 49 / 53 | 59 | 59 | |
| 89 | 28 | 59 / 0 | 42 / 18 | 60 | 0 | |
| 90 | 29 | 0 / 0 | 0 / 0 | 60 | 0 | |

| | Ascens Dra | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | S |
| 1 | 0 | 30/30 | 0/0 | 0 | 58 |
| 2 | 1 | 0/29 | 0/58 | 1 | 48 |
| 3 | 1 | 29/29 | 58/58 | 2 | 43 |
| 4 | 1 | 59/29 | 56/56 | 3 | 36 |
| 5 | 2 | 29/29 | 52/53 | 4 | 30 |
| 6 | 2 | 59/29 | 45/52 | 5 | 25 |
| 7 | 3 | 29/29 | 37/48 | 6 | 18 |
| 8 | 3 | 59/29 | 25/45 | 7 | 13 |
| 9 | 4 | 29/29 | 10/41 | 8 | 7 |
| 10 | 4 | 58/29 | 51/38 | 9 | 1 |
| 11 | 5 | 28/29 | 29/32 | 9 | 54 |
| 12 | 5 | 58/29 | 1/28 | 10 | 49 |
| 13 | 6 | 27/29 | 29/22 | 11 | 42 |
| 14 | 6 | 56/29 | 51/17 | 12 | 36 |
| 15 | 7 | 26/29 | 8/10 | 13 | 29 |
| 16 | 7 | 55/29 | 18/3 | 14 | 23 |
| 17 | 8 | 24/28 | 29/57 | 15 | 17 |
| 18 | 8 | 53/26 | 18/49 | 16 | 10 |
| 19 | 9 | 22/28 | 7/40 | 17 | 4 |
| 20 | 9 | 50/28 | 47/33 | 17 | 57 |
| 21 | 10 | 19/28 | 20/23 | 18 | 50 |
| 22 | 10 | 47/28 | 43/14 | 19 | 44 |
| 23 | 11 | 14/28 | 57/5 | 20 | 37 |
| 24 | 11 | 44/27 | 2/56 | 21 | 30 |
| 25 | 12 | 11/27 | 48/43 | 22 | 21 |
| 26 | 12 | 39/27 | 41/32 | 23 | 14 |
| 27 | 13 | 7/27 | 13/21 | 24 | 7 |
| 28 | 13 | 34/27 | 34/9 | 25 | 0 |
| 29 | 14 | 1/26 | 43/56 | 25 | 51 |
| 30 | 14 | 28/26 | 34/44 | 26 | 44 |

| | Ascens Dra | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | S |
| 31 | 14 | 55/26 | 33/29 | 27 | 35 |
| 32 | 15 | 21/26 | 52/16 | 28 | 27 |
| 33 | 15 | 48/23 | 8/2 | 29 | 19 |
| 34 | 16 | 14/21 | 10/46 | 30 | 9 |
| 35 | 16 | 39/25 | 56/32 | 31 | 0 |
| 36 | 17 | 5/25 | 28/15 | 31 | 50 |
| 37 | 17 | 30/24 | 43/59 | 32 | 41 |
| 38 | 17 | 55/24 | 42/43 | 33 | 31 |
| 39 | 18 | 20/24 | 25/26 | 34 | 20 |
| 40 | 18 | 44/24 | 51/7 | 35 | 9 |
| 41 | 19 | 8/23 | 58/49 | 35 | 58 |
| 42 | 19 | 32/23 | 47/29 | 36 | 46 |
| 43 | 19 | 56/23 | 16/11 | 37 | 35 |
| 44 | 20 | 19/22 | 27/50 | 38 | 22 |
| 45 | 20 | 42/22 | 17/31 | 39 | 10 |
| 46 | 21 | 4/22 | 48/9 | 39 | 57 |
| 47 | 21 | 26/21 | 57/48 | 40 | 43 |
| 48 | 21 | 48/21 | 45/27 | 41 | 29 |
| 49 | 22 | 10/21 | 12/4 | 42 | 14 |
| 50 | 22 | 31/20 | 16/40 | 42 | 59 |
| 51 | 22 | 51/20 | 46/18 | 43 | 44 |
| 52 | 23 | 12/19 | 14/54 | 44 | 21 |
| 53 | 23 | 32/19 | 8/29 | 45 | 10 |
| 54 | 23 | 51/19 | 37/4 | 45 | 53 |
| 55 | 24 | 10/18 | 41/29 | 46 | 31 |
| 56 | 24 | 29/18 | 20/14 | 47 | 16 |
| 57 | 25 | 47/17 | 34/46 | 47 | 55 |
| 58 | 25 | 5/17 | 20/20 | 48 | 35 |
| 59 | 25 | 22/16 | 40/52 | 49 | 13 |
| 60 | 25 | 39/16 | 32/25 | 49 | 51 |

| | Ascens Dra | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | S |
| 61 | 25 | 55/15 | 57/55 | 50 | 27 |
| 62 | 26 | 11/15 | 53/27 | 51 | 3 |
| 63 | 26 | 27/14 | 20/58 | 51 | 38 |
| 64 | 26 | 42/14 | 18/28 | 52 | 13 |
| 65 | 26 | 56/13 | 44/58 | 52 | 46 |
| 66 | 27 | 10/13 | 44/28 | 53 | 19 |
| 67 | 27 | 34/12 | 12/57 | 53 | 53 |
| 68 | 27 | 37/12 | 9/25 | 54 | 23 |
| 69 | 27 | 49/11 | 34/53 | 54 | 48 |
| 70 | 28 | 1/11 | 37/21 | 55 | 16 |
| 71 | 28 | 12/10 | 38/49 | 55 | 44 |
| 72 | 28 | 33/10 | 37/16 | 56 | 10 |
| 73 | 28 | 33/9 | 53/43 | 56 | 33 |
| 74 | 28 | 43/9 | 35/9 | 56 | 57 |
| 75 | 28 | 52/8 | 44/36 | 57 | 18 |
| 76 | 29 | 1/8 | 20/1 | 57 | 38 |
| 77 | 29 | 9/7 | 31/27 | 57 | 57 |
| 78 | 29 | 16/6 | 48/51 | 58 | 14 |
| 79 | 29 | 33/6 | 39/17 | 58 | 31 |
| 80 | 29 | 29/5 | 56/41 | 58 | 46 |
| 81 | 29 | 35/5 | 37/6 | 59 | 1 |
| 82 | 29 | 40/4 | 43/31 | 59 | 13 |
| 83 | 29 | 45/3 | 14/54 | 59 | 23 |
| 84 | 29 | 49/3 | 8/19 | 59 | 34 |
| 85 | 29 | 52/2 | 21/43 | 59 | 42 |
| 86 | 29 | 55/2 | 10/7 | 59 | 48 |
| 87 | 29 | 57/1 | 17/31 | 59 | 53 |
| 88 | 29 | 58/0 | 48/54 | 59 | 56 |
| 89 | 29 | 59/0 | 42/18 | 59 | 59 |
| 90 | 30 | 0/0 | 0/0 | 60 | 0 |

.31.

| | Ascēs dia | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 1 | 0 | 30<br>30 | 54<br>54 | 0 | 54 |
| 2 | 1 | 1<br>30 | 48<br>53 | 1 | 47 |
| 3 | 1 | 32<br>30 | 41<br>51 | 2 | 40 |
| 4 | 2 | 3<br>30 | 32<br>50 | 3 | 34 |
| 5 | 2 | 34<br>30 | 22<br>48 | 4 | 28 |
| 6 | 3 | 5<br>30 | 10<br>47 | 5 | 21 |
| 7 | 3 | 35<br>30 | 55<br>43 | 6 | 14 |
| 8 | 4 | 6<br>30 | 38<br>39 | 7 | 8 |
| 9 | 4 | 37<br>30 | 17<br>35 | 8 | 2 |
| 10 | 5 | 7<br>30 | 42<br>31 | 8 | 55 |
| 11 | 5 | 38<br>30 | 23<br>27 | 9 | 49 |
| 12 | 6 | 8<br>30 | 40<br>21 | 10 | 42 |
| 13 | 6 | 39<br>30 | 11<br>16 | 11 | 34 |
| 14 | 7 | 9<br>30 | 27<br>15 | 12 | 29 |
| 15 | 7 | 39<br>30 | 27<br>4 | 13 | 22 |
| 16 | 8 | 9<br>29 | 41<br>47 | 14 | 15 |
| 17 | 8 | 39<br>29 | 38<br>40 | 15 | 8 |
| 18 | 9 | 9<br>29 | 38<br>43 | 16 | 1 |
| 19 | 9 | 39<br>29 | 11<br>33 | 16 | 54 |
| 20 | 10 | 8<br>29 | 44<br>26 | 17 | 47 |
| 21 | 10 | 38<br>29 | 10<br>17 | 18 | 40 |
| 22 | 11 | 7<br>29 | 21<br>7 | 19 | 32 |
| 23 | 11 | 36<br>28 | 34<br>48 | 20 | 25 |
| 24 | 12 | 5<br>28 | 32<br>47 | 21 | 18 |
| 25 | 12 | 34<br>28 | 19<br>37 | 22 | 10 |
| 26 | 13 | 2<br>28 | 40<br>24 | 23 | 2 |
| 27 | 13 | 31<br>28 | 20<br>14 | 23 | 55 |
| 28 | 13 | 59<br>28 | 34<br>0 | 24 | 47 |
| 29 | 14 | 27<br>27 | 34<br>49 | 25 | 39 |
| 30 | 14 | 55<br>27 | 23<br>35 | 26 | 29 |

| | Ascēs dia | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 31 | 15 | 22<br>27 | 48<br>21 | 27 | 21 |
| 32 | 15 | 40<br>27 | 19<br>7 | 28 | 13 |
| 33 | 16 | 17<br>26 | 26<br>43 | 29 | 4 |
| 34 | 16 | 44<br>26 | 19<br>37 | 29 | 55 |
| 35 | 17 | 10<br>26 | 46<br>22 | 30 | 45 |
| 36 | 17 | 37<br>26 | 19<br>6 | 31 | 35 |
| 37 | 18 | 3<br>25 | 24<br>49 | 32 | 25 |
| 38 | 18 | 29<br>25 | 13<br>32 | 33 | 16 |
| 39 | 18 | 44<br>25 | 45<br>15 | 34 | 6 |
| 40 | 19 | 20<br>24 | 0<br>46 | 34 | 55 |
| 41 | 19 | 44<br>24 | 46<br>37 | 35 | 43 |
| 42 | 20 | 9<br>24 | 33<br>18 | 36 | 32 |
| 43 | 20 | 33<br>23 | 41<br>48 | 37 | 20 |
| 44 | 20 | 47<br>23 | 29<br>38 | 38 | 9 |
| 45 | 21 | 21<br>23 | 21<br>18 | 38 | 56 |
| 46 | 21 | 44<br>22 | 44<br>44 | 39 | 44 |
| 47 | 22 | 7<br>22 | 40<br>34 | 40 | 29 |
| 48 | 22 | 30<br>22 | 54<br>42 | 41 | 14 |
| 49 | 22 | 42<br>21 | 26<br>49 | 42 | 1 |
| 50 | 23 | 14<br>21 | 55<br>24 | 42 | 46 |
| 51 | 23 | 25<br>21 | 40<br>1 | 43 | 30 |
| 52 | 23 | 46<br>20 | 41<br>37 | 44 | 14 |
| 53 | 24 | 17<br>20 | 18<br>12 | 44 | 57 |
| 54 | 24 | 37<br>19 | 30<br>46 | 45 | 40 |
| 55 | 25 | 47<br>19 | 16<br>20 | 46 | 22 |
| 56 | 25 | 16<br>18 | 36<br>43 | 47 | 3 |
| 57 | 25 | 25<br>18 | 29<br>26 | 47 | 43 |
| 58 | 25 | 43<br>17 | 44<br>48 | 48 | 23 |
| 59 | 26 | 11<br>17 | 43<br>30 | 49 | 2 |
| 60 | 26 | 29<br>17 | 23<br>1 | 49 | 41 |

| | Ascēs dia | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 61 | 26 | 46<br>16 | 24<br>32 | 50 | 18 |
| 62 | 27 | 2<br>16 | 46<br>2 | 50 | 54 |
| 63 | 27 | 18<br>14 | 48<br>53 | 51 | 31 |
| 64 | 27 | 34<br>14 | 31<br>1 | 52 | 4 |
| 65 | 27 | 49<br>14 | 32<br>31 | 52 | 39 |
| 66 | 28 | 4<br>14 | 3<br>2 | 53 | 11 |
| 67 | 28 | 18<br>13 | 5<br>27 | 53 | 40 |
| 68 | 28 | 31<br>12 | 32<br>40 | 54 | 10 |
| 69 | 28 | 44<br>12 | 22<br>21 | 54 | 43 |
| 70 | 28 | 46<br>11 | 43<br>49 | 55 | 12 |
| 71 | 29 | 8<br>11 | 32<br>14 | 55 | 38 |
| 72 | 29 | 19<br>10 | 47<br>39 | 56 | 3 |
| 73 | 29 | 30<br>10 | 26<br>6 | 56 | 29 |
| 74 | 29 | 40<br>9 | 32<br>30 | 56 | 52 |
| 75 | 29 | 40<br>8 | 2<br>46 | 57 | 14 |
| 76 | 29 | 48<br>8 | 18<br>20 | 57 | 35 |
| 77 | 30 | 7<br>7 | 18<br>44 | 57 | 55 |
| 78 | 30 | 14<br>7 | 2<br>8 | 58 | 13 |
| 79 | 30 | 22<br>6 | 10<br>32 | 58 | 30 |
| 80 | 30 | 28<br>5 | 42<br>40 | 58 | 45 |
| 81 | 30 | 34<br>5 | 38<br>18 | 58 | 59 |
| 82 | 30 | 39<br>4 | 46<br>41 | 59 | 12 |
| 83 | 30 | 44<br>4 | 37<br>5 | 59 | 24 |
| 84 | 30 | 48<br>3 | 42<br>27 | 59 | 33 |
| 85 | 30 | 52<br>2 | 9<br>49 | 59 | 40 |
| 86 | 30 | 54<br>2 | 48<br>12 | 59 | 48 |
| 87 | 30 | 57<br>1 | 10<br>34 | 59 | 53 |
| 88 | 30 | 58<br>0 | 44<br>57 | 59 | 57 |
| 89 | 30 | 59<br>0 | 41<br>19 | 59 | 59 |
| 90 | 31 | 0<br>0 | 0<br>0 | 60 | 0 |

| Arg | G | M | S | M | S |
|---|---|---|---|---|---|
| Arg Dra | | | | | |
| 1 | 0 | 31<br>31 | 48<br>47 | 0 | 43 |
| 2 | 1 | 3<br>31 | 35<br>46 | 1 | 46 |
| 3 | 1 | 35<br>31 | 21<br>45 | 2 | 39 |
| 4 | 2 | 7<br>31 | 6<br>44 | 3 | 33 |
| 5 | 2 | 38<br>31 | 50<br>41 | 4 | 35 |
| 6 | 3 | 10<br>31 | 31<br>39 | 5 | 18 |
| 7 | 3 | 42<br>31 | 10<br>36 | 6 | 11 |
| 8 | 4 | 13<br>31 | 46<br>33 | 7 | 4 |
| 9 | 4 | 44<br>31 | 19<br>28 | 7 | 46 |
| 10 | 5 | 16<br>31 | 47<br>24 | 8 | 40 |
| 11 | 5 | 48<br>31 | 13<br>20 | 9 | 42 |
| 12 | 6 | 19<br>31 | 32<br>19 | 10 | 35 |
| 13 | 6 | 50<br>31 | 46<br>10 | 11 | 29 |
| 14 | 7 | 21<br>31 | 56<br>3 | 12 | 21 |
| 15 | 7 | 52<br>30 | 59<br>47 | 13 | 14 |
| 16 | 8 | 33<br>30 | 56<br>50 | 14 | 7 |
| 17 | 8 | 54<br>30 | 46<br>43 | 14 | 59 |
| 18 | 9 | 25<br>30 | 39<br>36 | 15 | 42 |
| 19 | 9 | 56<br>30 | 51<br>26 | 16 | 43 |
| 20 | 10 | 26<br>30 | 31<br>19 | 17 | 31 |
| 21 | 10 | 56<br>30 | 50<br>9 | 18 | 29 |
| 22 | 11 | 26<br>30 | 59<br>0 | 19 | 21 |
| 23 | 11 | 56<br>29 | 49<br>51 | 20 | 44 |
| 24 | 12 | 26<br>29 | 50<br>30 | 21 | 6 |
| 25 | 12 | 56<br>29 | 29<br>29 | 21 | 55 |
| 26 | 13 | 35<br>29 | 58<br>17 | 22 | 49 |
| 27 | 13 | 54<br>29 | 15<br>4 | 23 | 41 |
| 28 | 14 | 34<br>28 | 30<br>43 | 24 | 33 |
| 29 | 14 | 53<br>28 | 13<br>59 | 34 | 24 |
| 30 | 14 | 21<br>28 | 42<br>21 | 26 | 16 |
| 31 | 15 | 40<br>26 | 19<br>13 | 27 | 7 |
| 32 | 16 | 18<br>27 | 32<br>48 | 27 | 48 |
| 33 | 16 | 46<br>27 | 30<br>44 | 28 | 49 |
| 34 | 17 | 14<br>27 | 14<br>27 | 29 | 39 |
| 35 | 17 | 41<br>27 | 41<br>12 | 30 | 31 |
| 36 | 18 | 8<br>26 | 52<br>56 | 31 | 22 |
| 37 | 18 | 35<br>25 | 49<br>40 | 32 | 12 |
| 38 | 19 | 2<br>25 | 39<br>22 | 33 | 2 |
| 39 | 19 | 28<br>25 | 41<br>4 | 33 | 50 |
| 40 | 19 | 44<br>24 | 54<br>44 | 34 | 39 |
| 41 | 20 | 20<br>24 | 39<br>26 | 34 | 29 |
| 42 | 20 | 46<br>24 | 5<br>6 | 36 | 17 |
| 43 | 21 | 11<br>24 | 11<br>47 | 37 | 6 |
| 44 | 21 | 35<br>24 | 48<br>25 | 37 | 43 |
| 45 | 22 | 0<br>24 | 33<br>6 | 38 | 41 |
| 46 | 22 | 42<br>23 | 39<br>46 | 39 | 36 |
| 47 | 22 | 48<br>23 | 9<br>40 | 40 | 14 |
| 48 | 23 | 11<br>22 | 29<br>48 | 41 | 1 |
| 49 | 23 | 52<br>22 | 21<br>33 | 41 | 46 |
| 50 | 23 | 47<br>22 | 0<br>10 | 42 | 33 |
| 51 | 24 | 19<br>21 | 10<br>46 | 43 | 17 |
| 52 | 24 | 40<br>21 | 46<br>19 | 44 | 7 |
| 53 | 24 | 2<br>20 | 14<br>54 | 44 | 44 |
| 54 | 25 | 33<br>20 | 10<br>28 | 45 | 27 |
| 55 | 25 | 43<br>20 | 38<br>1 | 46 | 9 |
| 56 | 26 | 3<br>19 | 39<br>33 | 46 | 51 |
| 57 | 26 | 33<br>19 | 12<br>6 | 47 | 33 |
| 58 | 26 | 42<br>18 | 18<br>31 | 48 | 11 |
| 59 | 27 | 0<br>18 | 44<br>9 | 48 | 42 |
| 60 | 27 | 19<br>17 | 4<br>38 | 49 | 30 |
| 61 | 27 | 36<br>17 | 42<br>8 | 50 | 6 |
| 62 | 27 | 53<br>16 | 50<br>37 | 50 | 26 |
| 63 | 28 | 10<br>16 | 29<br>7 | 51 | 22 |
| 64 | 28 | 20<br>14 | 36<br>34 | 51 | 41 |
| 65 | 28 | 44<br>14 | 11<br>3 | 52 | 31 |
| 66 | 28 | 57<br>14 | 12<br>31 | 53 | 4 |
| 67 | 29 | 11<br>13 | 44<br>57 | 53 | 35 |
| 68 | 29 | 25<br>13 | 45<br>33 | 54 | 6 |
| 69 | 29 | 39<br>12 | 5<br>50 | 54 | 37 |
| 70 | 29 | 51<br>12 | 54<br>15 | 55 | 5 |
| 71 | 30 | 4<br>11 | 10<br>40 | 55 | 33 |
| 72 | 30 | 14<br>11 | 50<br>5 | 55 | 59 |
| 73 | 30 | 26<br>10 | 54<br>29 | 56 | 34 |
| 74 | 30 | 37<br>9 | 34<br>43 | 56 | 48 |
| 75 | 30 | 47<br>9 | 17<br>16 | 57 | 10 |
| 76 | 30 | 56<br>8 | 33<br>40 | 57 | 32 |
| 77 | 31 | 5<br>8 | 13<br>2 | 57 | 52 |
| 78 | 31 | 13<br>7 | 15<br>27 | 58 | 11 |
| 79 | 31 | 20<br>6 | 40<br>47 | 58 | 28 |
| 80 | 31 | 27<br>6 | 27<br>10 | 58 | 44 |
| 81 | 31 | 33<br>5 | 37<br>31 | 58 | 57 |
| 82 | 31 | 39<br>4 | 8<br>53 | 59 | 11 |
| 83 | 31 | 44<br>4 | 1<br>14 | 59 | 23 |
| 84 | 31 | 48<br>3 | 14<br>34 | 59 | 33 |
| 85 | 31 | 51<br>2 | 49<br>57 | 59 | 42 |
| 86 | 31 | 54<br>2 | 46<br>17 | 59 | 48 |
| 87 | 31 | 57<br>1 | 3<br>38 | 59 | 54 |
| 88 | 31 | 58<br>0 | 41<br>59 | 59 | 58 |
| 89 | 31 | 59<br>0 | 40<br>20 | 60 | 0 |
| 90 | 32 | 0<br>0 | 0<br>0 | 60 | 0 |

♒

| | Arcus G | m | 2 | Decl m | s |
|---|---|---|---|---|---|
| 1 | 0 | 32<br>32 | 41<br>40 | 0 | 52 |
| 2 | 1 | 5<br>32 | 31<br>39 | 1 | 41 |
| 3 | 1 | 38<br>32 | 0<br>38 | 2 | 37 |
| 4 | 2 | 10<br>32 | 38<br>37 | 3 | 30 |
| 5 | 2 | 43<br>32 | 15<br>34 | 4 | 22 |
| 6 | 3 | 15<br>32 | 49<br>32 | 5 | 14 |
| 7 | 3 | 48<br>32 | 21<br>29 | 6 | 6 |
| 8 | 4 | 20<br>32 | 40<br>25 | 6 | 59 |
| 9 | 4 | 53<br>32 | 15<br>22 | 7 | 52 |
| 10 | 5 | 25<br>32 | 37<br>17 | 8 | 43 |
| 11 | 5 | 57<br>32 | 44<br>13 | 9 | 36 |
| 12 | 6 | 30<br>32 | 7<br>8 | 10 | 28 |
| 13 | 7 | 2<br>32 | 15<br>2 | 11 | 20 |
| 14 | 7 | 34<br>31 | 17<br>46 | 12 | 12 |
| 15 | 8 | 6<br>31 | 13<br>40 | 13 | 5 |
| 16 | 8 | 38<br>31 | 3<br>4 | 13 | 56 |
| 17 | 9 | 9<br>31 | 45<br>36 | 14 | 49 |
| 18 | 9 | 41<br>31 | 21<br>27 | 15 | 41 |
| 19 | 10 | 12<br>31 | 48<br>20 | 16 | 34 |
| 20 | 10 | 44<br>31 | 8<br>11 | 17 | 27 |
| 21 | 11 | 15<br>31 | 19<br>1 | 18 | 17 |
| 22 | 11 | 26<br>30 | 20<br>43 | 19 | 11 |
| 23 | 12 | 17<br>30 | 13<br>43 | 20 | 1 |
| 24 | 12 | 47<br>30 | 46<br>31 | 20 | 52 |
| 25 | 13 | 18<br>30 | 27<br>20 | 21 | 44 |
| 26 | 13 | 48<br>30 | 47<br>9 | 22 | 30 |
| 27 | 14 | 18<br>29 | 46<br>57 | 23 | 28 |
| 28 | 14 | 48<br>29 | 43<br>44 | 24 | 19 |
| 29 | 15 | 18<br>29 | 37<br>31 | 25 | 11 |
| 30 | 15 | 48<br>29 | 8<br>18 | 26 | 2 |

| | Arcus G | m | 2 | Decl m | s |
|---|---|---|---|---|---|
| 31 | 16 | 17<br>29 | 26<br>4 | 26 | 53 |
| 32 | 16 | 46<br>28 | 30<br>49 | 27 | 44 |
| 33 | 17 | 15<br>28 | 19<br>34 | 28 | 34 |
| 34 | 17 | 43<br>28 | 43<br>19 | 29 | 21 |
| 35 | 18 | 12<br>28 | 12<br>3 | 30 | 15 |
| 36 | 18 | 40<br>28 | 15<br>40 | 31 | 6 |
| 37 | 19 | 8<br>27 | 1<br>30 | 31 | 56 |
| 38 | 19 | 35<br>27 | 31<br>10 | 32 | 44 |
| 39 | 20 | 3<br>26 | 41<br>53 | 33 | 31 |
| 40 | 20 | 29<br>26 | 34<br>34 | 34 | 24 |
| 41 | 20 | 56<br>26 | 8<br>14 | 35 | 12 |
| 42 | 21 | 22<br>24 | 22<br>44 | 36 | 2 |
| 43 | 21 | 48<br>24 | 17<br>34 | 36 | 49 |
| 44 | 22 | 13<br>24 | 41<br>13 | 37 | 37 |
| 45 | 22 | 39<br>24 | 4<br>41 | 38 | 25 |
| 46 | 23 | 3<br>24 | 44<br>29 | 39 | 13 |
| 47 | 23 | 28<br>24 | 24<br>6 | 40 | 0 |
| 48 | 23 | 52<br>23 | 30<br>43 | 40 | 46 |
| 49 | 24 | 16<br>23 | 13<br>20 | 41 | 39 |
| 50 | 24 | 39<br>22 | 33<br>44 | 42 | 18 |
| 51 | 25 | 2<br>22 | 27<br>30 | 43 | 3 |
| 52 | 25 | 24<br>22 | 41<br>3 | 43 | 41 |
| 53 | 25 | 47<br>21 | 0<br>37 | 44 | 31 |
| 54 | 26 | 8<br>21 | 31<br>10 | 45 | 14 |
| 55 | 26 | 39<br>20 | 47<br>43 | 45 | 47 |
| 56 | 26 | 40<br>20 | 30<br>14 | 46 | 39 |
| 57 | 27 | 10<br>19 | 45<br>44 | 47 | 20 |
| 58 | 27 | 30<br>19 | 29<br>18 | 48 | 2 |
| 59 | 27 | 49<br>18 | 47<br>41 | 48 | 49 |
| 60 | 28 | 8<br>18 | 34<br>16 | 49 | 19 |

| | Arcus G | m | 2 | Decl m | s |
|---|---|---|---|---|---|
| 61 | 28 | 26<br>17 | 40<br>46 | 49 | 49 |
| 62 | 28 | 44<br>17 | 36<br>15 | 50 | 36 |
| 63 | 29 | 1<br>16 | 51<br>42 | 51 | 11 |
| 64 | 29 | 18<br>16 | 33<br>9 | 51 | 47 |
| 65 | 29 | 34<br>15 | 42<br>36 | 52 | 21 |
| 66 | 29 | 50<br>15 | 18<br>2 | 52 | 55 |
| 67 | 30 | 5<br>14 | 20<br>29 | 53 | 28 |
| 68 | 30 | 29<br>13 | 48<br>54 | 54 | 0 |
| 69 | 30 | 33<br>13 | 42<br>18 | 54 | 30 |
| 70 | 30 | 47<br>12 | 0<br>43 | 54 | 59 |
| 71 | 30 | 59<br>12 | 43<br>6 | 55 | 27 |
| 72 | 31 | 11<br>11 | 49<br>30 | 55 | 54 |
| 73 | 31 | 33<br>10 | 19<br>53 | 56 | 20 |
| 74 | 31 | 34<br>10 | 12<br>17 | 56 | 44 |
| 75 | 31 | 44<br>9 | 27<br>38 | 57 | 8 |
| 76 | 31 | 54<br>9 | 7<br>0 | 57 | 30 |
| 77 | 32 | 3<br>8 | 5<br>21 | 57 | 50 |
| 78 | 32 | 11<br>7 | 26<br>42 | 58 | 9 |
| 79 | 32 | 19<br>7 | 8<br>3 | 58 | 27 |
| 80 | 32 | 26<br>6 | 11<br>37 | 58 | 43 |
| 81 | 32 | 32<br>5 | 34<br>41 | 58 | 58 |
| 82 | 32 | 38<br>5 | 19<br>5 | 59 | 11 |
| 83 | 32 | 43<br>4 | 34<br>35 | 59 | 21 |
| 84 | 32 | 47<br>3 | 28<br>43 | 59 | 30 |
| 85 | 32 | 51<br>3 | 31<br>3 | 59 | 40 |
| 86 | 32 | 54<br>2 | 34<br>23 | 59 | 47 |
| 87 | 32 | 56<br>1 | 57<br>42 | 59 | 53 |
| 88 | 32 | 58<br>1 | 39<br>1 | 59 | 56 |
| 89 | 32 | 59<br>0 | 40<br>20 | 59 | 59 |
| 90 | 33 | 0<br>0 | 0<br>0 | 60 | 0 |

|  | Arcus | dia |  |  |  |
|---|---|---|---|---|---|
|  | G | m | s | m | s |
| 1 | 0 | 33/33 | 33/33 | 0 | 52 |
| 2 | 1 | 7/33 | 6/31 | 1 | 43 |
| 3 | 1 | 40/33 | 37/31 | 2 | 36 |
| 4 | 2 | 14/33 | 8/29 | 3 | 27 |
| 5 | 2 | 47/33 | 37/26 | 4 | 19 |
| 6 | 3 | 21/33 | 3/24 | 5 | 11 |
| 7 | 3 | 54/33 | 37/22 | 6 | 3 |
| 8 | 4 | 27/33 | 49/18 | 6 | 54 |
| 9 | 5 | 1/33 | 7/13 | 7 | 46 |
| 10 | 5 | 34/33 | 30/10 | 8 | 38 |
| 11 | 6 | 7/33 | 30/5 | 9 | 29 |
| 12 | 6 | 40/33 | 35/0 | 10 | 21 |
| 13 | 7 | 13/32 | 35/49 | 11 | 13 |
| 14 | 7 | 46/32 | 39/49 | 12 | 5 |
| 15 | 8 | 19/32 | 18/41 | 12 | 56 |
| 16 | 8 | 51/32 | 59/51 | 13 | 48 |
| 17 | 9 | 34/32 | 34/38 | 14 | 40 |
| 18 | 9 | 57/32 | 2/30 | 15 | 31 |
| 19 | 10 | 29/32 | 33/11 | 16 | 23 |
| 20 | 11 | 1/32 | 33/3 | 17 | 14 |
| 21 | 11 | 33/31 | 30/54 | 18 | 6 |
| 22 | 12 | 5/31 | 31/43 | 18 | 57 |
| 23 | 12 | 37/31 | 14/34 | 19 | 49 |
| 24 | 13 | 8/31 | 48/23 | 20 | 40 |
| 25 | 13 | 40/31 | 11/12 | 21 | 32 |
| 26 | 14 | 11/31 | 23/1 | 22 | 23 |
| 27 | 14 | 42/30 | 34/48 | 23 | 15 |
| 28 | 15 | 13/30 | 12/36 | 24 | 5 |
| 29 | 15 | 43/30 | 48/22 | 24 | 56 |
| 30 | 16 | 14/30 | 14/9 | 25 | 46 |

|  | Arcus | dia |  |  |  |
|---|---|---|---|---|---|
|  | G | m | s | m | s |
| 31 | 16 | 44/29 | 19/51 | 26 | 37 |
| 32 | 17 | 14/29 | 14/39 | 27 | 27 |
| 33 | 17 | 43/29 | 53/21 | 28 | 19 |
| 34 | 18 | 13/29 | 18/9 | 29 | 9 |
| 35 | 18 | 43/28 | 37/44 | 30 | 0 |
| 36 | 19 | 11/28 | 31/56 | 30 | 49 |
| 37 | 19 | 39/28 | 57/18 | 31 | 39 |
| 38 | 20 | 8/28 | 15/1 | 32 | 29 |
| 39 | 20 | 36/27 | 16/44 | 33 | 18 |
| 40 | 21 | 3/27 | 58/22 | 34 | 7 |
| 41 | 21 | 31/27 | 20/4 | 34 | 57 |
| 42 | 21 | 58/26 | 32/43 | 35 | 45 |
| 43 | 22 | 25/26 | 6/22 | 36 | 34 |
| 44 | 22 | 51/26 | 38/1 | 37 | 23 |
| 45 | 23 | 17/25 | 29/37 | 38 | 9 |
| 46 | 23 | 43/25 | 8/16 | 38 | 57 |
| 47 | 24 | 8/24 | 34/42 | 39 | 44 |
| 48 | 24 | 33/24 | 16/30 | 40 | 32 |
| 49 | 24 | 57/24 | 46/5 | 41 | 16 |
| 50 | 25 | 21/23 | 41/59 | 42 | 2 |
| 51 | 25 | 44/23 | 30/14 | 42 | 41 |
| 52 | 26 | 8/22 | 44/41 | 43 | 32 |
| 53 | 26 | 31/22 | 31/20 | 44 | 16 |
| 54 | 26 | 53/21 | 51/43 | 44 | 0 |
| 55 | 27 | 15/21 | 14/24 | 45 | 43 |
| 56 | 27 | 37/20 | 9/46 | 46 | 24 |
| 57 | 27 | 48/20 | 4/26 | 47 | 7 |
| 58 | 28 | 18/19 | 31/51 | 47 | 49 |
| 59 | 28 | 38/19 | 28/24 | 48 | 30 |
| 60 | 28 | 57/18 | 53/46 | 49 | 9 |

|  | Arcus | dia |  |  |  |
|---|---|---|---|---|---|
|  | G | m | s | m | s |
| 61 | 29 | 16/18 | 49/13 | 49 | 47 |
| 62 | 29 | 35/17 | 12/50 | 50 | 35 |
| 63 | 29 | 53/17 | 2/18 | 51 | 2 |
| 64 | 30 | 10/16 | 30/43 | 51 | 37 |
| 65 | 30 | 27/16 | 3/10 | 52 | 14 |
| 66 | 30 | 43/15 | 13/35 | 52 | 47 |
| 67 | 30 | 58/14 | 48/0 | 53 | 21 |
| 68 | 31 | 13/14 | 48/42 | 53 | 52 |
| 69 | 31 | 28/13 | 13/47 | 54 | 23 |
| 70 | 31 | 41/13 | 59/11 | 54 | 54 |
| 71 | 31 | 55/12 | 10/33 | 55 | 22 |
| 72 | 32 | 7/11 | 43/56 | 55 | 50 |
| 73 | 32 | 19/11 | 39/17 | 56 | 16 |
| 74 | 32 | 30/10 | 56/39 | 56 | 41 |
| 75 | 32 | 41/10 | 35/0 | 57 | 4 |
| 76 | 32 | 51/9 | 35/20 | 57 | 25 |
| 77 | 33 | 0/8 | 55/40 | 57 | 46 |
| 78 | 33 | 9/8 | 35/0 | 58 | 6 |
| 79 | 33 | 17/7 | 35/19 | 58 | 23 |
| 80 | 33 | 24/6 | 54/38 | 58 | 40 |
| 81 | 33 | 31/5 | 33/48 | 58 | 54 |
| 82 | 33 | 37/4 | 30/14 | 59 | 8 |
| 83 | 33 | 43/4 | 45/34 | 59 | 20 |
| 84 | 33 | 47/3 | 19/42 | 59 | 3 |
| 85 | 33 | 51/3 | 11/10 | 59 | 40 |
| 86 | 33 | 54/2 | 21/39 | 59 | 47 |
| 87 | 33 | 56/1 | 50/24 | 59 | 52 |
| 88 | 33 | 58/1 | 34/4 | 59 | 57 |
| 89 | 33 | 59/0 | 39/21 | 59 | 59 |
| 90 | 34 | 0/0 | 0/0 | 60 | 0 |

# 35

| Arcus dea | | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 1 | 0 | 34<br>34 | 21<br>24 | 0 | 51 |
| 2 | 1 | 8<br>34 | 49<br>34 | 1 | 43 |
| 3 | 1 | 43<br>34 | 13<br>33 | 2 | 33 |
| 4 | 2 | 17<br>34 | 39<br>21 | 3 | 24 |
| 5 | 2 | 51<br>34 | 56<br>18 | 4 | 15 |
| 6 | 3 | 26<br>34 | 14<br>16 | 5 | 7 |
| 7 | 4 | 0<br>34 | 30<br>13 | 5 | 58 |
| 8 | 4 | 34<br>34 | 43<br>9 | 6 | 49 |
| 9 | 5 | 8<br>34 | 52<br>6 | 7 | 41 |
| 10 | 5 | 42<br>34 | 58<br>1 | 8 | 33 |
| 11 | 6 | 16<br>33 | 59<br>57 | 9 | 23 |
| 12 | 6 | 40<br>33 | 56<br>52 | 10 | 14 |
| 13 | 7 | 24<br>33 | 48<br>45 | 11 | 5 |
| 14 | 7 | 58<br>33 | 34<br>40 | 11 | 56 |
| 15 | 8 | 33<br>33 | 14<br>33 | 12 | 47 |
| 16 | 9 | 5<br>33 | 47<br>27 | 13 | 39 |
| 17 | 9 | 39<br>33 | 14<br>19 | 14 | 29 |
| 18 | 10 | 12<br>33 | 33<br>11 | 15 | 20 |
| 19 | 10 | 44<br>33 | 34<br>3 | 16 | 12 |
| 20 | 11 | 18<br>32 | 41<br>54 | 17 | 3 |
| 21 | 11 | 51<br>32 | 42<br>46 | 17 | 55 |
| 22 | 12 | 24<br>32 | 28<br>34 | 18 | 44 |
| 23 | 12 | 52<br>32 | 3<br>24 | 19 | 36 |
| 24 | 13 | 29<br>32 | 28<br>19 | 20 | 27 |
| 25 | 13 | 1<br>32 | 43<br>3 | 21 | 17 |
| 26 | 14 | 33<br>31 | 46<br>51 | 22 | 8 |
| 27 | 14 | 5<br>31 | 37<br>40 | 23 | 0 |
| 28 | 15 | 37<br>31 | 17<br>26 | 23 | 50 |
| 29 | 16 | 8<br>31 | 43<br>13 | 24 | 41 |
| 30 | 16 | 39<br>31 | 56<br>0 | 25 | 32 |
| 31 | 17 | 10<br>30 | 56<br>41 | 26 | 22 |
| 32 | 17 | 41<br>30 | 41<br>31 | 27 | 12 |
| 33 | 18 | 12<br>30 | 12<br>15 | 28 | 3 |
| 34 | 18 | 42<br>30 | 21<br>0 | 28 | 54 |
| 35 | 19 | 12<br>29 | 21<br>45 | 29 | 45 |
| 36 | 19 | 42<br>29 | 10<br>26 | 30 | 33 |
| 37 | 20 | 11<br>29 | 36<br>8 | 31 | 22 |
| 38 | 20 | 40<br>28 | 44<br>50 | 32 | 12 |
| 39 | 21 | 9<br>28 | 34<br>31 | 33 | 1 |
| 40 | 21 | 38<br>28 | 51<br>12 | 33 | 50 |
| 41 | 22 | 6<br>27 | 17<br>52 | 34 | 39 |
| 42 | 22 | 34<br>27 | 9<br>31 | 35 | 28 |
| 43 | 23 | 1<br>27 | 40<br>11 | 36 | 16 |
| 44 | 23 | 28<br>26 | 11<br>41 | 37 | 3 |
| 45 | 23 | 55<br>26 | 38<br>27 | 37 | 53 |
| 46 | 24 | 22<br>26 | 5<br>3 | 38 | 41 |
| 47 | 24 | 48<br>25 | 8<br>40 | 39 | 28 |
| 48 | 25 | 13<br>25 | 48<br>14 | 40 | 14 |
| 49 | 25 | 39<br>24 | 2<br>51 | 41 | 1 |
| 50 | 26 | 3<br>24 | 53<br>24 | 41 | 47 |
| 51 | 26 | 28<br>23 | 17<br>55 | 42 | 33 |
| 52 | 26 | 52<br>23 | 10<br>31 | 43 | 17 |
| 53 | 27 | 14<br>23 | 41<br>4 | 44 | 2 |
| 54 | 27 | 38<br>22 | 51<br>36 | 44 | 46 |
| 55 | 28 | 1<br>22 | 27<br>7 | 45 | 29 |
| 56 | 28 | 33<br>21 | 34<br>38 | 46 | 13 |
| 57 | 28 | 54<br>21 | 12<br>8 | 46 | 55 |
| 58 | 29 | 6<br>20 | 20<br>38 | 47 | 36 |
| 59 | 29 | 26<br>20 | 58<br>0 | 48 | 15 |
| 60 | 29 | 41<br>19 | 2<br>34 | 48 | 51 |
| 61 | 30 | 6<br>19 | 36<br>1 | 49 | 36 |
| 62 | 30 | 24<br>18 | 37<br>21 | 50 | 14 |
| 63 | 30 | 44<br>17 | 4<br>53 | 50 | 51 |
| 64 | 31 | 1<br>17 | 57<br>20 | 51 | 29 |
| 65 | 31 | 19<br>16 | 17<br>43 | 52 | 3 |
| 66 | 31 | 36<br>16 | 0<br>9 | 52 | 38 |
| 67 | 31 | 52<br>14 | 9<br>31 | 53 | 11 |
| 68 | 32 | 7<br>14 | 40<br>54 | 53 | 46 |
| 69 | 32 | 22<br>14 | 35<br>48 | 54 | 17 |
| 70 | 32 | 36<br>13 | 53<br>39 | 54 | 47 |
| 71 | 32 | 50<br>13 | 32<br>1 | 55 | 16 |
| 72 | 33 | 3<br>12 | 33<br>22 | 55 | 43 |
| 73 | 33 | 15<br>11 | 54<br>42 | 56 | 10 |
| 74 | 33 | 27<br>11 | 37<br>2 | 56 | 35 |
| 75 | 33 | 38<br>10 | 39<br>21 | 56 | 59 |
| 76 | 33 | 49<br>9 | 0<br>41 | 57 | 22 |
| 77 | 33 | 58<br>9 | 41<br>0 | 57 | 43 |
| 78 | 34 | 7<br>8 | 41<br>17 | 58 | 2 |
| 79 | 34 | 15<br>7 | 58<br>36 | 58 | 22 |
| 80 | 34 | 23<br>6 | 34<br>53 | 58 | 38 |
| 81 | 34 | 30<br>6 | 27<br>11 | 58 | 54 |
| 82 | 34 | 36<br>5 | 38<br>21 | 59 | 7 |
| 83 | 34 | 42<br>4 | 5<br>24 | 59 | 20 |
| 84 | 34 | 46<br>4 | 50<br>1 | 59 | 30 |
| 85 | 34 | 50<br>3 | 51<br>17 | 59 | 39 |
| 86 | 34 | 54<br>2 | 8<br>34 | 59 | 46 |
| 87 | 34 | 56<br>1 | 42<br>50 | 59 | 52 |
| 88 | 34 | 58<br>1 | 33<br>6 | 59 | 56 |
| 89 | 34 | 59<br>0 | 38<br>33 | 59 | 58 |
| 90 | 35 | 0<br>0 | 0<br>0 | 60 | 0 |

|  | Arcus | dĩa |  |  |  |  | Arcus | dĩa |  |  |  |  | Arcus | dĩa |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | G | M | 2 | M | 2 |  | G | M | 2 | M | 2 |  | G | M | 2 | M | 2 |
| 1 | 0 | 31<br>35 | 16<br>16 | 0 | 50 | 31 | 17 | 37<br>31 | 18<br>35 | 26 | 6 | 61 | 30 | 56<br>19 | 13<br>39 | 49 | 23 |
| 2 | 1 | 10<br>35 | 32<br>14 | 1 | 41 | 32 | 18 | 8<br>31 | 43<br>22 | 26 | 56 | 62 | 31 | 15<br>19 | 51<br>4 | 50 | 2 |
| 3 | 1 | 44<br>35 | 46<br>14 | 2 | 33 | 33 | 18 | 40<br>31 | 14<br>6 | 27 | 47 | 63 | 31 | 34<br>18 | 54<br>31 | 50 | 41 |
| 4 | 2 | 21<br>35 | 0<br>11 | 3 | 22 | 34 | 19 | 11<br>30 | 21<br>41 | 28 | 36 | 64 | 31 | 53<br>17 | 26<br>42 | 51 | 17 |
| 5 | 2 | 56<br>35 | 11<br>10 | 4 | 13 | 35 | 19 | 42<br>30 | 10<br>33 | 29 | 26 | 65 | 32 | 11<br>17 | 50<br>18 | 51 | 54 |
| 6 | 3 | 31<br>35 | 21<br>7 | 5 | 3 | 36 | 20 | 12<br>30 | 43<br>15 | 30 | 15 | 66 | 32 | 28<br>16 | 28<br>42 | 52 | 30 |
| 7 | 4 | 6<br>35 | 28<br>4 | 5 | 54 | 37 | 20 | 42<br>29 | 48<br>48 | 31 | 4 | 67 | 32 | 44<br>16 | 20<br>6 | 53 | 4 |
| 8 | 4 | 41<br>35 | 32<br>1 | 6 | 44 | 38 | 21 | 12<br>29 | 46<br>39 | 31 | 54 | 68 | 33 | 1<br>15 | 36<br>26 | 53 | 36 |
| 9 | 5 | 16<br>34 | 33<br>57 | 7 | 35 | 39 | 21 | 42<br>29 | 35<br>20 | 32 | 44 | 69 | 33 | 16<br>14 | 52<br>48 | 54 | 8 |
| 10 | 5 | 51<br>34 | 30<br>42 | 8 | 25 | 40 | 22 | 11<br>29 | 41<br>1 | 33 | 34 | 70 | 33 | 31<br>14 | 40<br>8 | 54 | 39 |
| 11 | 6 | 26<br>34 | 6<br>48 | 9 | 16 | 41 | 22 | 44<br>28 | 26<br>41 | 34 | 23 | 71 | 33 | 44<br>13 | 48<br>38 | 55 | 8 |
| 12 | 7 | 1<br>34 | 40<br>43 | 10 | 7 | 42 | 23 | 9<br>28 | 37<br>19 | 35 | 10 | 72 | 33 | 59<br>12 | 16<br>47 | 55 | 38 |
| 13 | 7 | 35<br>34 | 33<br>37 | 10 | 57 | 43 | 23 | 37<br>27 | 46<br>48 | 36 | 0 | 73 | 34 | 12<br>12 | 9<br>7 | 56 | 4 |
| 14 | 8 | 10<br>34 | 30<br>31 | 11 | 47 | 44 | 24 | 5<br>27 | 44<br>31 | 36 | 50 | 74 | 34 | 24<br>11 | 13<br>26 | 56 | 30 |
| 15 | 8 | 24<br>34 | 1<br>24 | 12 | 38 | 45 | 24 | 33<br>27 | 31<br>14 | 37 | 36 | 75 | 34 | 35<br>10 | 28<br>44 | 56 | 54 |
| 16 | 9 | 19<br>34 | 26<br>17 | 13 | 28 | 46 | 25 | 0<br>26 | 46<br>50 | 38 | 23 | 76 | 34 | 46<br>10 | 22<br>2 | 57 | 18 |
| 17 | 9 | 53<br>34 | 43<br>10 | 14 | 20 | 47 | 25 | 27<br>26 | 36<br>26 | 39 | 10 | 77 | 34 | 56<br>9 | 32<br>19 | 57 | 41 |
| 18 | 10 | 27<br>34 | 53<br>3 | 15 | 11 | 48 | 26 | 42<br>26 | 2<br>1 | 39 | 57 | 78 | 35 | 7<br>8 | 43<br>37 | 58 | 0 |
| 19 | 11 | 1<br>33 | 56<br>54 | 16 | 0 | 49 | 26 | 20<br>25 | 3<br>37 | 40 | 44 | 79 | 35 | 14<br>7 | 20<br>52 | 58 | 19 |
| 20 | 11 | 35<br>33 | 50<br>47 | 16 | 51 | 50 | 26 | 41<br>25 | 40<br>10 | 41 | 30 | 80 | 35 | 22<br>7 | 12<br>19 | 58 | 38 |
| 21 | 12 | 9<br>33 | 37<br>34 | 17 | 41 | 51 | 27 | 10<br>24 | 50<br>43 | 42 | 16 | 81 | 35 | 29<br>6 | 21<br>32 | 58 | 52 |
| 22 | 12 | 43<br>33 | 12<br>27 | 18 | 33 | 52 | 27 | 35<br>24 | 33<br>16 | 43 | 1 | 82 | 35 | 35<br>5 | 44<br>40 | 59 | 7 |
| 23 | 13 | 16<br>33 | 39<br>16 | 19 | 22 | 53 | 27 | 49<br>23 | 49<br>48 | 43 | 46 | 83 | 35 | 41<br>4 | 24<br>54 | 59 | 19 |
| 24 | 13 | 49<br>33 | 54<br>5 | 20 | 13 | 54 | 28 | 33<br>23 | 37<br>19 | 44 | 31 | 84 | 35 | 46<br>4 | 20<br>10 | 59 | 30 |
| 25 | 14 | 23<br>32 | 0<br>54 | 21 | 4 | 55 | 28 | 46<br>22 | 56<br>51 | 45 | 16 | 85 | 35 | 50<br>3 | 50<br>32 | 59 | 39 |
| 26 | 14 | 54<br>32 | 52<br>43 | 21 | 54 | 56 | 29 | 9<br>22 | 47<br>20 | 45 | 58 | 86 | 35 | 53<br>2 | 42<br>40 | 59 | 48 |
| 27 | 15 | 28<br>32 | 37<br>30 | 22 | 44 | 57 | 29 | 32<br>21 | 7<br>59 | 46 | 40 | 87 | 35 | 56<br>1 | 32<br>42 | 59 | 53 |
| 28 | 16 | 1<br>32 | 7<br>17 | 23 | 35 | 58 | 29 | 43<br>21 | 56<br>17 | 47 | 22 | 88 | 35 | 58<br>1 | 28<br>8 | 59 | 58 |
| 29 | 16 | 33<br>32 | 24<br>4 | 24 | 25 | 59 | 30 | 14<br>20 | 13<br>26 | 48 | 4 | 89 | 35 | 59<br>0 | 36<br>32 | 60 | 0 |
| 30 | 17 | 51<br>31 | 28<br>50 | 25 | 15 | 60 | 30 | 35<br>20 | 59<br>13 | 48 | 44 | 90 | 36 | 0<br>0 | 0<br>0 | 60 | 0 |

# 31

| | Arg dra | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 1 | 0 | 36<br>36 | 6<br>7 | 0 | 50 |
| 2 | 1 | 13<br>36 | 13<br>5 | 1 | 39 |
| 3 | 1 | 48<br>36 | 18<br>4 | 2 | 29 |
| 4 | 2 | 34<br>36 | 32<br>2 | 3 | 19 |
| 5 | 3 | 0<br>36 | 32<br>0 | 4 | 9 |
| 6 | 3 | 36<br>35 | 34<br>58 | 4 | 59 |
| 7 | 4 | 12<br>35 | 22<br>54 | 5 | 48 |
| 8 | 4 | 48<br>35 | 16<br>52 | 6 | 39 |
| 9 | 5 | 34<br>35 | 8<br>41 | 7 | 28 |
| 10 | 5 | 59<br>35 | 55<br>43 | 8 | 19 |
| 11 | 6 | 35<br>35 | 38<br>39 | 9 | 9 |
| 12 | 7 | 11<br>35 | 17<br>33 | 9 | 58 |
| 13 | 7 | 48<br>35 | 50<br>21 | 10 | 48 |
| 14 | 8 | 22<br>35 | 17<br>22 | 11 | 39 |
| 15 | 8 | 57<br>35 | 39<br>14 | 12 | 29 |
| 16 | 9 | 22<br>35 | 54<br>9 | 13 | 19 |
| 17 | 10 | 8<br>35 | 3<br>4 | 14 | 8 |
| 18 | 10 | 43<br>34 | 4<br>52 | 14 | 58 |
| 19 | 11 | 27<br>34 | 56<br>45 | 15 | 49 |
| 20 | 11 | 52<br>34 | 43<br>31 | 16 | 40 |
| 21 | 12 | 27<br>34 | 18<br>27 | 17 | 29 |
| 22 | 13 | 1<br>34 | 45<br>16 | 18 | 18 |
| 23 | 13 | 36<br>34 | 1<br>7 | 19 | 9 |
| 24 | 14 | 30<br>33 | 8<br>56 | 19 | 59 |
| 25 | 14 | 44<br>33 | 4<br>44 | 20 | 49 |
| 26 | 15 | 17<br>33 | 48<br>33 | 21 | 38<br>39 |
| 27 | 15 | 51<br>33 | 31<br>21 | 22 | 29 |
| 28 | 16 | 24<br>33 | 42<br>7 | 23 | 19 |
| 29 | 16 | 57<br>32 | 49<br>50 | 24 | 9 |
| 30 | 17 | 30<br>32 | 43<br>45 | 24 | 59 |

| | Arcus dra | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 31 | 18 | 3<br>32 | 24<br>25 | 25 | 49 |
| 32 | 18 | 39<br>32 | 49<br>12 | 26 | 40 |
| 33 | 19 | 8<br>31 | 1<br>56 | 27 | 30 |
| 34 | 19 | 39<br>31 | 57<br>39 | 28 | 18 |
| 35 | 20 | 11<br>31 | 36<br>22 | 29 | 8 |
| 36 | 20 | 43<br>31 | 58<br>4 | 29 | 58 |
| 37 | 21 | 14<br>30 | 3<br>46 | 30 | 48 |
| 38 | 21 | 44<br>30 | 50<br>29 | 31 | 37 |
| 39 | 22 | 15<br>30 | 19<br>10 | 32 | 26 |
| 40 | 22 | 45<br>29 | 29<br>49 | 33 | 15 |
| 41 | 23 | 15<br>29 | 18<br>29 | 34 | 4 |
| 42 | 23 | 44<br>29 | 47<br>9 | 34 | 53 |
| 43 | 24 | 13<br>28 | 56<br>48 | 35 | 42 |
| 44 | 24 | 23<br>28 | 44<br>3 | 36 | 28 |
| 45 | 25 | 11<br>28 | 7<br>2 | 37 | 18 |
| 46 | 25 | 39<br>27 | 9<br>37 | 38 | 5 |
| 47 | 26 | 0<br>27 | 46<br>15 | 38 | 53 |
| 48 | 26 | 33<br>26 | 59<br>48 | 39 | 40 |
| 49 | 27 | 0<br>26 | 47<br>33 | 40 | 27 |
| 50 | 27 | 37<br>25 | 10<br>56 | 41 | 13 |
| 51 | 27 | 53<br>25 | 6<br>38 | 41 | 59 |
| 52 | 28 | 18<br>25 | 30<br>7 | 42 | 46 |
| 53 | 28 | 43<br>24 | 35<br>33 | 43 | 31 |
| 54 | 29 | 8<br>24 | 8<br>4 | 44 | 15 |
| 55 | 29 | 32<br>23 | 12<br>33 | 44 | 58 |
| 56 | 29 | 55<br>23 | 25<br>2 | 45 | 42 |
| 57 | 30 | 18<br>22 | 41<br>31 | 46 | 26 |
| 58 | 30 | 41<br>21 | 12<br>49 | 47 | 8 |
| 59 | 31 | 3<br>20 | 17<br>26 | 47 | 50 |
| 60 | 31 | 34<br>20 | 43<br>45 | 48 | 32 |

| | Arcus dra | | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 61 | 31 | 45<br>20 | 51<br>18 | 49 | 12 |
| 62 | 32 | 5<br>19 | 53<br>43 | 49 | 51 |
| 63 | 32 | 55<br>19 | 36<br>1 | 50 | 29 |
| 64 | 32 | 44<br>18 | 43<br>32 | 51 | 8 |
| 65 | 33 | 3<br>17 | 15<br>53 | 51 | 43 |
| 66 | 33 | 31<br>17 | 8<br>16 | 52 | 20 |
| 67 | 33 | 38<br>16 | 22<br>38 | 52 | 54 |
| 68 | 33 | 55<br>15 | 2<br>58 | 53 | 28 |
| 69 | 34 | 11<br>15 | 0<br>19 | 54 | 1 |
| 70 | 34 | 36<br>14 | 19<br>37 | 54 | 31 |
| 71 | 34 | 40<br>13 | 56<br>18 | 55 | 2 |
| 72 | 34 | 54<br>13 | 54<br>11 | 55 | 31 |
| 73 | 35 | 8<br>12 | 9<br>33 | 55 | 59 |
| 74 | 35 | 20<br>11 | 43<br>51 | 56 | 27 |
| 75 | 35 | 33<br>11 | 33<br>7 | 56 | 52 |
| 76 | 35 | 43<br>10 | 40<br>25 | 57 | 16 |
| 77 | 35 | 54<br>9 | 5<br>38 | 57 | 37 |
| 78 | 36 | 3<br>8 | 43<br>56 | 57 | 59 |
| 79 | 36 | 12<br>8 | 39<br>11 | 58 | 17 |
| 80 | 36 | 20<br>7 | 50<br>23 | 58 | 33 |
| 81 | 36 | 28<br>6 | 13<br>39 | 58 | 50 |
| 82 | 36 | 39<br>5 | 52<br>52 | 59 | 4 |
| 83 | 36 | 40<br>5 | 44<br>6 | 59 | 17 |
| 84 | 36 | 45<br>4 | 50<br>19 | 59 | 29 |
| 85 | 36 | 50<br>3 | 9<br>33 | 59 | 38 |
| 86 | 36 | 53<br>2 | 43<br>45 | 59 | 46 |
| 87 | 36 | 56<br>1 | 27<br>59 | 59 | 52 |
| 88 | 36 | 18<br>1 | 26<br>5 | 59 | 56 |
| 89 | 36 | 59<br>0 | 37<br>23 | 59 | 58 |
| 90 | 37 | 0<br>0 | 0<br>0 | 60 | 0 |

| | Arcus | | | | | Dia | |
|---|---|---|---|---|---|---|---|
| | G | M | 2a | | | M | S |
| 1 | 0 | 36 | 56 | 36 | 56 | 0 | 49 |
| 2 | 1 | 13 | 52 | 36 | 55 | 1 | 38 |
| 3 | 1 | 50 | 47 | 36 | 54 | 2 | 28 |
| 4 | 2 | 27 | 41 | 36 | 52 | 3 | 17 |
| 5 | 3 | 4 | 33 | 36 | 50 | 4 | 6 |
| 6 | 3 | 41 | 23 | 36 | 47 | 4 | 55 |
| 7 | 4 | 18 | 10 | 36 | 45 | 5 | 44 |
| 8 | 4 | 54 | 55 | 36 | 41 | 6 | 34 |
| 9 | 5 | 31 | 36 | 36 | 38 | 7 | 23 |
| 10 | 6 | 8 | 14 | 36 | 33 | 8 | 12 |
| 11 | 6 | 44 | 47 | 36 | 28 | 9 | 1 |
| 12 | 7 | 21 | 15 | 36 | 23 | 9 | 51 |
| 13 | 7 | 57 | 38 | 36 | 18 | 10 | 40 |
| 14 | 8 | 33 | 56 | 36 | 12 | 11 | 29 |
| 15 | 9 | 10 | 8 | 36 | 5 | 12 | 19 |
| 16 | 9 | 46 | 13 | 35 | 58 | 13 | 8 |
| 17 | 10 | 22 | 11 | 35 | 51 | 13 | 58 |
| 18 | 10 | 58 | 2 | 35 | 43 | 14 | 47 |
| 19 | 11 | 33 | 45 | 35 | 36 | 15 | 37 |
| 20 | 12 | 9 | 21 | 35 | 26 | 16 | 26 |
| 21 | 12 | 44 | 47 | 35 | 16 | 17 | 15 |
| 22 | 13 | 20 | 3 | 35 | 7 | 18 | 6 |
| 23 | 13 | 55 | 10 | 34 | 57 | 18 | 55 |
| 24 | 14 | 30 | 7 | 34 | 26 | 19 | 44 |
| 25 | 15 | 4 | 33 | 34 | 47 | 20 | 34 |
| 26 | 15 | 39 | 20 | 34 | 20 | 21 | 24 |
| 27 | 16 | 13 | 40 | 34 | 11 | 22 | 14 |
| 28 | 16 | 48 | 1 | 33 | 57 | 23 | 3 |
| 29 | 17 | 21 | 58 | 32 | 47 | 23 | 53 |
| 30 | 17 | 54 | 45 | 33 | 31 | 24 | 43 |
| 31 | 18 | 29 | 13 | 33 | 16 | 25 | 32 |
| 32 | 19 | 2 | 29 | 33 | 2 | 26 | 22 |
| 33 | 19 | 35 | 31 | 32 | 44 | 27 | 10 |
| 34 | 20 | 8 | 15 | 32 | 29 | 28 | 1 |
| 35 | 20 | 40 | 44 | 32 | 12 | 28 | 50 |
| 36 | 21 | 12 | 56 | 31 | 44 | 29 | 39 |
| 37 | 21 | 44 | 40 | 31 | 41 | 30 | 29 |
| 38 | 22 | 16 | 21 | 31 | 18 | 31 | 18 |
| 39 | 22 | 47 | 39 | 30 | 48 | 32 | 6 |
| 40 | 23 | 18 | 27 | 30 | 59 | 32 | 56 |
| 41 | 23 | 49 | 26 | 30 | 18 | 33 | 44 |
| 42 | 24 | 19 | 44 | 29 | 48 | 34 | 34 |
| 43 | 24 | 49 | 32 | 29 | 40 | 35 | 23 |
| 44 | 25 | 19 | 12 | 29 | 15 | 36 | 11 |
| 45 | 25 | 48 | 27 | 28 | 45 | 36 | 58 |
| 46 | 26 | 17 | 12 | 28 | 24 | 37 | 46 |
| 47 | 26 | 45 | 36 | 28 | 0 | 38 | 34 |
| 48 | 27 | 13 | 36 | 27 | 51 | 39 | 22 |
| 49 | 27 | 41 | 27 | 27 | 7 | 40 | 9 |
| 50 | 28 | 8 | 34 | 26 | 42 | 40 | 55 |
| 51 | 29 | 35 | 4 | 26 | 41 | 41 | 43 |
| 52 | 29 | 1 | 20 | 24 | 26 | 42 | 28 |
| 53 | 29 | 27 | 6 | 24 | 17 | 43 | 13 |
| 54 | 29 | 52 | 3 | 24 | 21 | 44 | 1 |
| 55 | 30 | 17 | 10 | 24 | 11 | 44 | 53 |
| 56 | 30 | 41 | 21 | 23 | 26 | 45 | 31 |
| 57 | 31 | 4 | 13 | 24 | 13 | 46 | 10 |
| 58 | 31 | 28 | 26 | 22 | 41 | 46 | 59 |
| 59 | 31 | 51 | 7 | 22 | 8 | 47 | 48 |
| 60 | 32 | 13 | 15 | 21 | 32 | 48 | 16 |
| 61 | 32 | 34 | 47 | 20 | 56 | 48 | 48 |
| 62 | 32 | 55 | 43 | 20 | 21 | 49 | 38 |
| 63 | 33 | 16 | 4 | 19 | 36 | 50 | 17 |
| 64 | 33 | 35 | 41 | 19 | 7 | 50 | 44 |
| 65 | 33 | 54 | 48 | 19 | 30 | 51 | 33 |
| 66 | 34 | 13 | 28 | 18 | 50 | 52 | 8 |
| 67 | 34 | 31 | 18 | 17 | 12 | 52 | 44 |
| 68 | 34 | 48 | 30 | 16 | 31 | 53 | 18 |
| 69 | 35 | 5 | 1 | 15 | 29 | 53 | 40 |
| 70 | 35 | 20 | 40 | 14 | 8 | 54 | 30 |
| 71 | 35 | 34 | 48 | 12 | 27 | 54 | 49 |
| 72 | 35 | 47 | 15 | 13 | 23 | 55 | 26 |
| 73 | 36 | 2 | 6 | 13 | 1 | 55 | 42 |
| 74 | 36 | 15 | 7 | 12 | 16 | 56 | 20 |
| 75 | 36 | 27 | 23 | 11 | 51 | 56 | 44 |
| 76 | 36 | 50 | 46 | 10 | 26 | 57 | 9 |
| 77 | 36 | 41 | 25 | 10 | 10 | 57 | 32 |
| 78 | 37 | 1 | 25 | 9 | 12 | 57 | 53 |
| 79 | 37 | 10 | 46 | 8 | 21 | 58 | 13 |
| 80 | 37 | 19 | 33 | 7 | 22 | 58 | 31 |
| 81 | 37 | 27 | 3 | 6 | 45 | 58 | 46 |
| 82 | 37 | 33 | 46 | 6 | 4 | 59 | 3 |
| 83 | 37 | 40 | 1 | 4 | 18 | 59 | 17 |
| 84 | 37 | 44 | 19 | 4 | 28 | 59 | 27 |
| 85 | 37 | 48 | 47 | 3 | 21 | 59 | 38 |
| 86 | 37 | 52 | 8 | 2 | 41 | 59 | 44 |
| 87 | 37 | 54 | 49 | 2 | 3 | 59 | 52 |
| 88 | 37 | 57 | 52 | 1 | 13 | 59 | 56 |
| 89 | 37 | 59 | 36 | 0 | 24 | 59 | 57 |
| 90 | 38 | 0 | 0 | 0 | 0 | 60 | 0 |

# 39

| | G | M | 2 | M | S | | G | M | 2 | M | S | | G | M | 2 | M | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Arcus diei | | | | | | Arcus diei | | | | | | Arcus diei | | | | |
| 1 | 0 | 37 / 37 | 45 / 45 | 0 | 49 | 31 | 18 | 54 / 34 | 45 / 6 | 25 | 15 | 61 | 33 | 33 / 21 | 45 / 37 | 48 | 43 |
| 2 | 1 | 15 / 37 | 30 / 45 | 1 | 38 | 32 | 19 | 28 / 33 | 11 / 40 | 26 | 4 | 62 | 33 | 45 / 21 | 22 / 0 | 49 | 34 |
| 3 | 1 | 53 / 37 | 15 / 43 | 2 | 23 | 33 | 20 | 2 / 33 | 41 / 35 | 26 | 53 | 63 | 34 | 6 / 20 | 22 / 24 | 50 | 4 |
| 4 | 2 | 30 / 37 | 58 / 47 | 3 | 14 | 34 | 20 | 36 / 33 | 16 / 18 | 27 | 42 | 64 | 34 | 36 / 19 | 46 / 47 | 50 | 42 |
| 5 | 3 | 8 / 37 | 29 / 39 | 4 | 3 | 35 | 21 | 9 / 33 | 34 / 1 | 28 | 31 | 65 | 34 | 46 / 19 | 31 / 5 | 51 | 20 |
| 6 | 3 | 46 / 37 | 18 / 37 | 4 | 51 | 36 | 21 | 42 / 32 | 35 / 44 | 29 | 20 | 66 | 35 | 5 / 18 | 36 / 26 | 51 | 58 |
| 7 | 4 | 23 / 37 | 55 / 34 | 5 | 40 | 37 | 22 | 15 / 32 | 19 / 26 | 30 | 10 | 67 | 35 | 24 / 17 | 2 / 46 | 52 | 34 |
| 8 | 5 | 1 / 37 | 29 / 30 | 6 | 28 | 38 | 22 | 47 / 32 | 45 / 6 | 30 | 58 | 68 | 35 | 47 / 17 | 48 / 4 | 53 | 10 |
| 9 | 5 | 38 / 37 | 59 / 27 | 7 | 17 | 39 | 23 | 19 / 31 | 51 / 48 | 31 | 48 | 69 | 35 | 58 / 16 | 52 / 22 | 53 | 44 |
| 10 | 6 | 16 / 37 | 26 / 22 | 8 | 5 | 40 | 23 | 51 / 31 | 39 / 28 | 32 | 37 | 70 | 36 | 15 / 15 | 14 / 43 | 54 | 17 |
| 11 | 6 | 53 / 37 | 48 / 18 | 8 | 54 | 41 | 24 | 23 / 31 | 7 / 7 | 33 | 26 | 71 | 36 | 30 / 14 | 57 / 42 | 54 | 45 |
| 12 | 7 | 31 / 37 | 6 / 12 | 9 | 42 | 42 | 24 | 54 / 30 | 14 / 46 | 34 | 14 | 72 | 36 | 45 / 14 | 51 / 11 | 55 | 17 |
| 13 | 8 | 8 / 37 | 18 / 7 | 10 | 32 | 43 | 25 | 25 / 30 | 0 / 23 | 35 | 2 | 73 | 37 | 0 / 13 | 2 / 27 | 55 | 47 |
| 14 | 8 | 45 / 37 | 25 / 2 | 11 | 20 | 44 | 25 | 55 / 30 | 23 / 0 | 35 | 51 | 74 | 37 | 13 / 12 | 29 / 47 | 56 | 14 |
| 15 | 9 | 22 / 36 | 21 / 54 | 12 | 8 | 45 | 26 | 25 / 29 | 23 / 31 | 36 | 39 | 75 | 37 | 36 / 11 | 10 / 55 | 56 | 40 |
| 16 | 9 | 59 / 36 | 21 / 48 | 12 | 58 | 46 | 26 | 55 / 29 | 0 / 13 | 37 | 27 | 76 | 37 | 38 / 11 | 5 / 9 | 57 | 6 |
| 17 | 10 | 36 / 36 | 9 / 40 | 13 | 46 | 47 | 27 | 24 / 28 | 13 / 48 | 38 | 14 | 77 | 37 | 49 / 10 | 14 / 27 | 57 | 28 |
| 18 | 11 | 12 / 36 | 49 / 33 | 14 | 30 | 48 | 27 | 53 / 28 | 1 / 22 | 39 | 2 | 78 | 37 | 59 / 9 | 39 / 34 | 57 | 51 |
| 19 | 11 | 49 / 36 | 22 / 25 | 15 | 25 | 49 | 28 | 21 / 27 | 23 / 55 | 39 | 40 | 79 | 38 | 9 / 8 | 9 / 47 | 58 | 11 |
| 20 | 12 | 25 / 36 | 47 / 15 | 16 | 13 | 50 | 28 | 49 / 27 | 18 / 30 | 40 | 38 | 80 | 38 | 17 / 7 | 44 / 17 | 58 | 30 |
| 21 | 13 | 2 / 36 | 2 / 7 | 17 | 3 | 51 | 29 | 16 / 27 | 48 / 0 | 41 | 23 | 81 | 38 | 25 / 7 | 51 / 8 | 58 | 47 |
| 22 | 13 | 38 / 35 | 9 / 56 | 17 | 51 | 52 | 29 | 43 / 26 | 48 / 31 | 42 | 9 | 82 | 38 | 52 / 6 | 59 / 19 | 59 | 2 |
| 23 | 14 | 44 / 35 | 5 / 47 | 18 | 47 | 53 | 30 | 10 / 56 | 19 / 2 | 42 | 56 | 83 | 38 | 39 / 5 | 18 / 28 | 59 | 16 |
| 24 | 14 | 49 / 35 | 42 / 35 | 19 | 29 | 54 | 30 | 36 / 25 | 21 / 32 | 43 | 41 | 84 | 38 | 44 / 4 | 40 / 39 | 59 | 58 |
| 25 | 15 | 25 / 35 | 27 / 24 | 20 | 19 | 55 | 31 | 1 / 24 | 43 / 1 | 44 | 26 | 85 | 38 | 29 / 3 | 25 / 48 | 59 | 37 |
| 26 | 16 | 0 / 35 | 51 / 13 | 21 | 8 | 56 | 31 | 20 / 24 | 44 / 29 | 45 | 11 | 86 | 38 | 53 / 2 | 13 / 58 | 59 | 44 |
| 27 | 16 | 36 / 35 | 4 / 0 | 21 | 57 | 57 | 31 | 51 / 23 | 22 / 56 | 45 | 54 | 87 | 38 | 56 / 2 | 11 / 7 | 59 | 40 |
| 28 | 17 | 11 / 34 | 4 / 47 | 22 | 40 | 58 | 32 | 15 / 23 | 19 / 22 | 46 | 39 | 88 | 38 | 58 / 1 | 18 / 16 | 59 | 56 |
| 29 | 17 | 45 / 34 | 51 / 34 | 23 | 36 | 59 | 32 | 38 / 22 | 41 / 40 | 47 | 22 | 89 | 38 | 59 / 0 | 34 / 26 | 59 | 59 |
| 30 | 18 | 20 / 34 | 25 / 20 | 24 | 26 | 60 | 33 | 1 / 21 | 31 / 15 | 48 | 2 | 90 | 39 | 0 / 0 | 0 / 0 | 60 | 0 |

| | Arcub | | | Dra | |
|---|---|---|---|---|---|
| | G | m | 2 | m | s |
| 1 | 0 | 38<br>38 | 34<br>34 | 0 | 48 |
| 2 | 1 | 17<br>38 | 8<br>32 | 1 | 35 |
| 3 | 1 | 55<br>38 | 40<br>33 | 2 | 24 |
| 4 | 2 | 34<br>38 | 12<br>30 | 3 | 11 |
| 5 | 3 | 12<br>38 | 42<br>27 | 3 | 59 |
| 6 | 3 | 51<br>38 | 9<br>26 | 4 | 47 |
| 7 | 4 | 29<br>38 | 35<br>22 | 5 | 34 |
| 8 | 5 | 7<br>38 | 57<br>19 | 6 | 22 |
| 9 | 5 | 46<br>38 | 16<br>14 | 7 | 10 |
| 10 | 6 | 32<br>38 | 51<br>11 | 7 | 48 |
| 11 | 7 | 2<br>38 | 42<br>6 | 8 | 46 |
| 12 | 7 | 40<br>38 | 48<br>2 | 9 | 35 |
| 13 | 8 | 18<br>37 | 40<br>55 | 10 | 22 |
| 14 | 8 | 56<br>37 | 45<br>50 | 11 | 11 |
| 15 | 9 | 34<br>37 | 35<br>44 | 11 | 59 |
| 16 | 10 | 12<br>37 | 19<br>36 | 12 | 47 |
| 17 | 10 | 49<br>37 | 55<br>30 | 13 | 36 |
| 18 | 11 | 27<br>37 | 25<br>22 | 14 | 23 |
| 19 | 12 | 4<br>37 | 47<br>13 | 14 | 12 |
| 20 | 12 | 43<br>37 | 0<br>5 | 16 | 0 |
| 21 | 13 | 19<br>36 | 5<br>55 | 16 | 49 |
| 22 | 13 | 56<br>36 | 0<br>46 | 17 | 37 |
| 23 | 14 | 32<br>36 | 46<br>35 | 18 | 25 |
| 24 | 15 | 9<br>36 | 21<br>55 | 19 | 18 |
| 25 | 15 | 44<br>36 | 46<br>13 | 20 | 3 |
| 26 | 16 | 21<br>36 | 55<br>2 | 20 | 42 |
| 27 | 16 | 48<br>35 | 1<br>49 | 21 | 40 |
| 28 | 17 | 33<br>35 | 50<br>37 | 22 | 30 |
| 29 | 18 | 9<br>35 | 27<br>24 | 23 | 17 |
| 30 | 18 | 44<br>35 | 51<br>9 | 24 | 7 |

| | Arcub | | | Dra | |
|---|---|---|---|---|---|
| | G | m | 2 | m | s |
| 31 | 19 | 20<br>34 | 0<br>55 | 24 | 46 |
| 32 | 19 | 54<br>34 | 55<br>37 | 25 | 44 |
| 33 | 20 | 29<br>34 | 34<br>29 | 26 | 34 |
| 34 | 21 | 3<br>34 | 48<br>7 | 27 | 22 |
| 35 | 21 | 38<br>33 | 4<br>40 | 28 | 12 |
| 36 | 22 | 11<br>33 | 55<br>34 | 29 | 1 |
| 37 | 22 | 45<br>33 | 29<br>14 | 29 | 49 |
| 38 | 23 | 18<br>32 | 43<br>46 | 30 | 39 |
| 39 | 23 | 51<br>32 | 39<br>37 | 31 | 28 |
| 40 | 24 | 24<br>32 | 16<br>17 | 32 | 17 |
| 41 | 24 | 56<br>31 | 33<br>55 | 33 | 5 |
| 42 | 25 | 28<br>31 | 28<br>34 | 33 | 44 |
| 43 | 26 | 0<br>31 | 2<br>12 | 34 | 42 |
| 44 | 26 | 31<br>30 | 14<br>48 | 35 | 30 |
| 45 | 27 | 3<br>30 | 2<br>25 | 36 | 19 |
| 46 | 27 | 32<br>30 | 27<br>1 | 37 | 7 |
| 47 | 28 | 2<br>29 | 28<br>35 | 37 | 55 |
| 48 | 28 | 32<br>29 | 3<br>40 | 38 | 42 |
| 49 | 29 | 1<br>28 | 13<br>43 | 39 | 30 |
| 50 | 29 | 29<br>28 | 46<br>14 | 40 | 17 |
| 51 | 29 | 53<br>27 | 11<br>46 | 41 | 4 |
| 52 | 30 | 29<br>27 | 57<br>18 | 41 | 51 |
| 53 | 30 | 53<br>26 | 15<br>47 | 42 | 36 |
| 54 | 31 | 20<br>26 | 2<br>17 | 43 | 23 |
| 55 | 31 | 46<br>25 | 29<br>46 | 44 | 8 |
| 56 | 32 | 12<br>25 | 4<br>12 | 44 | 49 |
| 57 | 32 | 37<br>24 | 47<br>41 | 45 | 38 |
| 58 | 33 | 1<br>24 | 48<br>4 | 46 | 20 |
| 59 | 33 | 26<br>23 | 3<br>30 | 47 | 4 |
| 60 | 33 | 49<br>22 | 33<br>55 | 47 | 47 |

| | Arcub | | | Dra | |
|---|---|---|---|---|---|
| | G | m | 2 | m | s |
| 61 | 34 | 12<br>22 | 28<br>18 | 48 | 28 |
| 62 | 34 | 34<br>21 | 46<br>40 | 49 | 9 |
| 63 | 34 | 56<br>21 | 26<br>2 | 49 | 51 |
| 64 | 35 | 17<br>20 | 28<br>33 | 50 | 31 |
| 65 | 35 | 37<br>19 | 51<br>43 | 51 | 10 |
| 66 | 35 | 57<br>19 | 34<br>2 | 51 | 48 |
| 67 | 36 | 16<br>18 | 36<br>25 | 52 | 24 |
| 68 | 36 | 34<br>17 | 48<br>38 | 52 | 59 |
| 69 | 36 | 52<br>16 | 36<br>55 | 53 | 34 |
| 70 | 37 | 9<br>16 | 31<br>11 | 54 | 7 |
| 71 | 37 | 24<br>14 | 42<br>26 | 54 | 39 |
| 72 | 37 | 47<br>14 | 8<br>47 | 55 | 10 |
| 73 | 37 | 55<br>13 | 49<br>54 | 55 | 39 |
| 74 | 38 | 9<br>13 | 43<br>7 | 56 | 8 |
| 75 | 38 | 22<br>12 | 50<br>2 | 56 | 36 |
| 76 | 38 | 35<br>11 | 11<br>31 | 57 | 4 |
| 77 | 38 | 46<br>10 | 42<br>44 | 57 | 26 |
| 78 | 38 | 57<br>9 | 26<br>54 | 57 | 48 |
| 79 | 39 | 7<br>9 | 20<br>4 | 58 | 8 |
| 80 | 39 | 16<br>8 | 34<br>14 | 58 | 28 |
| 81 | 39 | 24<br>7 | 38<br>33 | 58 | 47 |
| 82 | 39 | 32<br>6 | 1<br>33 | 59 | 0 |
| 83 | 39 | 38<br>5 | 34<br>50 | 59 | 13 |
| 84 | 39 | 44<br>4 | 14<br>48 | 59 | 26 |
| 85 | 39 | 49<br>3 | 2<br>53 | 59 | 37 |
| 86 | 39 | 52<br>3 | 57<br>4 | 59 | 47 |
| 87 | 39 | 56<br>2 | 1<br>13 | 59 | 53 |
| 88 | 39 | 58<br>1 | 14<br>19 | 59 | 57 |
| 89 | 39 | 59<br>0 | 33<br>27 | 60 | 0 |
| 90 | 40 | 0<br>0 | 0<br>0 | 60 | 0 |

41

| | Arcus | diei | | | |
|---|---|---|---|---|---|
| | G | M | 2 | m | s |
| 1 | 0 | 39 / 39 | 22 / 21 | 0 | 41 |
| 2 | 1 | 18 / 39 | 43 / 21 | 1 | 34 |
| 3 | 1 | 58 / 39 | 4 / 19 | 2 | 21 |
| 4 | 2 | 37 / 39 | 23 / 18 | 3 | 8 |
| 5 | 3 | 16 / 39 | 41 / 15 | 3 | 55 |
| 6 | 3 | 55 / 39 | 56 / 13 | 4 | 43 |
| 7 | 4 | 35 / 39 | 9 / 10 | 5 | 30 |
| 8 | 5 | 14 / 39 | 19 / 7 | 6 | 17 |
| 9 | 5 | 53 / 39 | 26 / 3 | 7 | 4 |
| 10 | 6 | 32 / 38 | 29 / 59 | 7 | 52 |
| 11 | 7 | 11 / 38 | 28 / 55 | 8 | 39 |
| 12 | 7 | 50 / 38 | 23 / 49 | 9 | 26 |
| 13 | 8 | 29 / 38 | 12 / 44 | 10 | 14 |
| 14 | 9 | 7 / 38 | 56 / 38 | 11 | 1 |
| 15 | 9 | 46 / 38 | 34 / 32 | 11 | 48 |
| 16 | 10 | 25 / 38 | 6 / 25 | 12 | 35 |
| 17 | 11 | 3 / 38 | 31 / 17 | 13 | 23 |
| 18 | 11 | 41 / 38 | 48 / 11 | 14 | 12 |
| 19 | 12 | 19 / 38 | 59 / 1 | 14 | 59 |
| 20 | 12 | 58 / 37 | 0 / 42 | 15 | 47 |
| 21 | 13 | 35 / 37 | 42 / 43 | 16 | 34 |
| 22 | 14 | 13 / 37 | 37 / 34 | 17 | 23 |
| 23 | 14 | 41 / 37 | 11 / 25 | 18 | 11 |
| 24 | 15 | 28 / 37 | 36 / 13 | 18 | 59 |
| 25 | 16 | 5 / 37 | 49 / 2 | 19 | 47 |
| 26 | 16 | 42 / 36 | 51 / 40 | 20 | 35 |
| 27 | 17 | 19 / 36 | 47 / 39 | 21 | 24 |
| 28 | 17 | 56 / 36 | 20 / 24 | 22 | 11 |
| 29 | 18 | 32 / 36 | 44 / 14 | 23 | 1 |
| 30 | 19 | 8 / 35 | 58 / 48 | 23 | 49 |

| | Arcus | diei | | | |
|---|---|---|---|---|---|
| | G | M | 2 | m | s |
| 31 | 19 | 44 / 35 | 56 / 43 | 24 | 37 |
| 32 | 20 | 20 / 35 | 39 / 29 | 25 | 26 |
| 33 | 20 | 56 / 35 | 8 / 12 | 26 | 14 |
| 34 | 21 | 31 / 34 | 20 / 47 | 27 | 4 |
| 35 | 22 | 6 / 34 | 17 / 39 | 27 | 42 |
| 36 | 22 | 40 / 34 | 56 / 22 | 28 | 41 |
| 37 | 23 | 14 / 34 | 18 / 4 | 29 | 29 |
| 38 | 23 | 49 / 33 | 22 / 44 | 30 | 18 |
| 39 | 24 | 23 / 33 | 7 / 26 | 31 | 7 |
| 40 | 24 | 56 / 33 | 33 / 5 | 31 | 55 |
| 41 | 25 | 29 / 32 | 38 / 44 | 32 | 44 |
| 42 | 26 | 2 / 32 | 22 / 22 | 33 | 33 |
| 43 | 26 | 34 / 32 | 44 / 0 | 34 | 22 |
| 44 | 27 | 6 / 31 | 44 / 37 | 35 | 10 |
| 45 | 27 | 38 / 31 | 21 / 15 | 35 | 48 |
| 46 | 28 | 9 / 30 | 35 / 49 | 36 | 46 |
| 47 | 28 | 40 / 30 | 43 / 24 | 37 | 33 |
| 48 | 29 | 10 / 29 | 41 / 46 | 38 | 21 |
| 49 | 29 | 40 / 29 | 43 / 30 | 39 | 10 |
| 50 | 30 | 10 / 29 | 13 / 2 | 39 | 57 |
| 51 | 30 | 39 / 28 | 14 / 35 | 40 | 44 |
| 52 | 31 | 7 / 28 | 48 / 3 | 41 | 31 |
| 53 | 31 | 35 / 27 | 41 / 37 | 42 | 18 |
| 54 | 32 | 3 / 27 | 25 / 2 | 43 | 5 |
| 55 | 32 | 30 / 26 | 27 / 32 | 43 | 50 |
| 56 | 32 | 56 / 25 | 59 / 46 | 44 | 34 |
| 57 | 33 | 22 / 24 | 44 / 23 | 45 | 20 |
| 58 | 33 | 48 / 24 | 18 / 49 | 46 | 4 |
| 59 | 34 | 13 / 24 | 7 / 13 | 46 | 48 |
| 60 | 34 | 37 / 23 | 20 / 36 | 47 | 30 |

| | Arcus | diei | | | |
|---|---|---|---|---|---|
| | G | M | 2 | m | s |
| 61 | 35 | 0 / 22 | 46 / 49 | 48 | 14 |
| 62 | 35 | 23 / 22 | 55 / 22 | 48 | 55 |
| 63 | 35 | 46 / 21 | 17 / 44 | 49 | 36 |
| 64 | 36 | 7 / 21 | 59 / 2 | 50 | 17 |
| 65 | 36 | 29 / 20 | 1 / 21 | 50 | 56 |
| 66 | 36 | 49 / 19 | 22 / 38 | 51 | 34 |
| 67 | 37 | 9 / 18 | 0 / 57 | 52 | 12 |
| 68 | 37 | 27 / 18 | 57 / 13 | 52 | 48 |
| 69 | 37 | 46 / 17 | 10 / 28 | 53 | 23 |
| 70 | 38 | 3 / 16 | 38 / 43 | 53 | 57 |
| 71 | 38 | 20 / 15 | 21 / 57 | 54 | 30 |
| 72 | 38 | 36 / 15 | 18 / 10 | 55 | 3 |
| 73 | 38 | 51 / 14 | 28 / 23 | 55 | 34 |
| 74 | 39 | 5 / 12 | 51 / 35 | 56 | 3 |
| 75 | 39 | 18 / 12 | 26 / 46 | 56 | 30 |
| 76 | 39 | 32 / 11 | 32 / 56 | 56 | 56 |
| 77 | 39 | 44 / 11 | 8 / 6 | 57 | 21 |
| 78 | 39 | 55 / 10 | 14 / 14 | 57 | 43 |
| 79 | 40 | 5 / 9 | 28 / 42 | 58 | 5 |
| 80 | 40 | 14 / 8 | 42 / 31 | 58 | 23 |
| 81 | 40 | 23 / 7 | 23 / 38 | 58 | 42 |
| 82 | 40 | 31 / 6 | 1 / 40 | 58 | 58 |
| 83 | 40 | 37 / 5 | 47 / 43 | 59 | 13 |
| 84 | 40 | 43 / 4 | 40 / 49 | 59 | 24 |
| 85 | 40 | 48 / 4 | 39 / 5 | 59 | 35 |
| 86 | 40 | 52 / 3 | 44 / 10 | 59 | 44 |
| 87 | 40 | 55 / 2 | 54 / 7 | 59 | 51 |
| 88 | 40 | 58 / 1 | 11 / 52 | 59 | 56 |
| 89 | 40 | 59 / 0 | 33 / 27 | 59 | 58 |
| 90 | 41 | 0 / 0 | 0 / 0 | 60 | 0 |

| | Ascub | | | | | Dia | |
|---|---|---|---|---|---|---|---|
| | G | M | | S | | M | S |
| 1 | 0 | 40 | 40 | 9 | 8 | 0 | 46 |
| 2 | 1 | 20 | 40 | 17 | 8 | 1 | 33 |
| 3 | 2 | 0 | 40 | 25 | 6 | 2 | 19 |
| 4 | 2 | 40 | 40 | 31 | 5 | 3 | 6 |
| 5 | 3 | 20 | 40 | 36 | 3 | 3 | 52 |
| 6 | 4 | 0 | 40 | 39 | 0 | 4 | 38 |
| 7 | 4 | 40 | 39 | 39 | 52 | 5 | 24 |
| 8 | 5 | 20 | 39 | 36 | 57 | 6 | 11 |
| 9 | 6 | 0 | 39 | 30 | 51 | 6 | 58 |
| 10 | 6 | 40 | 39 | 21 | 46 | 7 | 44 |
| 11 | 7 | 20 | 39 | 7 | 42 | 8 | 31 |
| 12 | 7 | 59 | 39 | 49 | 37 | 9 | 17 |
| 13 | 8 | 39 | 39 | 56 | 31 | 10 | 4 |
| 14 | 9 | 18 | 39 | 57 | 24 | 10 | 51 |
| 15 | 9 | 58 | 39 | 32 | 19 | 11 | 38 |
| 16 | 10 | 37 | 39 | 41 | 13 | 12 | 24 |
| 17 | 11 | 16 | 39 | 54 | 6 | 13 | 12 |
| 18 | 11 | 55 | 38 | 0 | 58 | 13 | 59 |
| 19 | 12 | 34 | 38 | 58 | 49 | 14 | 46 |
| 20 | 13 | 13 | 38 | 47 | 42 | 15 | 33 |
| 21 | 13 | 52 | 38 | 29 | 31 | 16 | 20 |
| 22 | 14 | 31 | 38 | 0 | 22 | 17 | 8 |
| 23 | 15 | 9 | 38 | 23 | 15 | 17 | 55 |
| 24 | 15 | 47 | 38 | 34 | 2 | 18 | 43 |
| 25 | 16 | 24 | 37 | 36 | 50 | 19 | 30 |
| 26 | 17 | 3 | 37 | 20 | 39 | 20 | 18 |
| 27 | 17 | 41 | 37 | 5 | 26 | 21 | 6 |
| 28 | 18 | 18 | 37 | 31 | 12 | 21 | 54 |
| 29 | 18 | 55 | 37 | 44 | 2 | 22 | 43 |
| 30 | 19 | 32 | 36 | 47 | 46 | 23 | 29 |

| | Ascub | | | | | Dia | |
|---|---|---|---|---|---|---|---|
| | G | M | | S | | M | S |
| 31 | 20 | 9 | 36 | 33 | 52 | 24 | 18 |
| 32 | 20 | 46 | 36 | 5 | 17 | 25 | 6 |
| 33 | 21 | 23 | 36 | 22 | 2 | 25 | 55 |
| 34 | 21 | 58 | 35 | 44 | 54 | 26 | 42 |
| 35 | 22 | 34 | 35 | 9 | 28 | 27 | 31 |
| 36 | 23 | 9 | 35 | 37 | 10 | 28 | 19 |
| 37 | 23 | 44 | 34 | 47 | 43 | 29 | 9 |
| 38 | 24 | 19 | 34 | 40 | 34 | 29 | 48 |
| 39 | 24 | 54 | 34 | 14 | 14 | 30 | 46 |
| 40 | 25 | 28 | 33 | 28 | 49 | 31 | 34 |
| 41 | 26 | 2 | 33 | 22 | 32 | 32 | 22 |
| 42 | 26 | 35 | 33 | 44 | 11 | 33 | 11 |
| 43 | 27 | 9 | 32 | 6 | 48 | 33 | 59 |
| 44 | 27 | 41 | 32 | 42 | 24 | 34 | 48 |
| 45 | 28 | 14 | 32 | 19 | 1 | 35 | 36 |
| 46 | 28 | 46 | 31 | 30 | 36 | 36 | 24 |
| 47 | 29 | 17 | 31 | 40 | 12 | 37 | 14 |
| 48 | 29 | 49 | 30 | 8 | 44 | 38 | 1 |
| 49 | 30 | 19 | 30 | 45 | 17 | 38 | 48 |
| 50 | 30 | 40 | 29 | 10 | 49 | 39 | 36 |
| 51 | 31 | 19 | 29 | 49 | 20 | 40 | 23 |
| 52 | 31 | 49 | 28 | 19 | 50 | 41 | 10 |
| 53 | 32 | 18 | 28 | 9 | 21 | 41 | 48 |
| 54 | 32 | 46 | 27 | 30 | 47 | 42 | 43 |
| 55 | 33 | 14 | 27 | 17 | 16 | 43 | 31 |
| 56 | 33 | 41 | 26 | 35 | 43 | 44 | 16 |
| 57 | 34 | 8 | 26 | 14 | 7 | 45 | 1 |
| 58 | 34 | 34 | 25 | 55 | 33 | 45 | 46 |
| 59 | 34 | 59 | 24 | 44 | 46 | 46 | 30 |
| 60 | 35 | 24 | 24 | 41 | 19 | 47 | 14 |

| | Ascub | | | | | Dia | |
|---|---|---|---|---|---|---|---|
| | G | M | | S | | M | S |
| 61 | 35 | 49 | 23 | 10 | 40 | 47 | 58 |
| 62 | 36 | 12 | 23 | 40 | 3 | 48 | 42 |
| 63 | 36 | 34 | 22 | 45 | 23 | 49 | 22 |
| 64 | 36 | 58 | 21 | 16 | 41 | 50 | 2 |
| 65 | 37 | 19 | 20 | 57 | 49 | 50 | 42 |
| 66 | 37 | 40 | 20 | 56 | 15 | 51 | 21 |
| 67 | 38 | 1 | 19 | 12 | 33 | 52 | 0 |
| 68 | 38 | 20 | 18 | 24 | 48 | 52 | 37 |
| 69 | 38 | 39 | 18 | 33 | 2 | 53 | 13 |
| 70 | 38 | 57 | 17 | 34 | 16 | 53 | 49 |
| 71 | 39 | 14 | 16 | 51 | 30 | 54 | 23 |
| 72 | 39 | 31 | 14 | 7 | 41 | 54 | 54 |
| 73 | 39 | 47 | 12 | 2 | 42 | 55 | 25 |
| 74 | 40 | 1 | 14 | 52 | 2 | 55 | 51 |
| 75 | 40 | 14 | 13 | 56 | 12 | 56 | 23 |
| 76 | 40 | 29 | 12 | 8 | 21 | 56 | 49 |
| 77 | 40 | 41 | 11 | 39 | 58 | 57 | 14 |
| 78 | 40 | 52 | 10 | 47 | 36 | 57 | 38 |
| 79 | 41 | 3 | 9 | 33 | 42 | 58 | 0 |
| 80 | 41 | 13 | 8 | 14 | 40 | 58 | 21 |
| 81 | 41 | 22 | 7 | 5 | 49 | 58 | 38 |
| 82 | 41 | 29 | 7 | 49 | 1 | 58 | 56 |
| 83 | 41 | 37 | 6 | 0 | 5 | 59 | 11 |
| 84 | 41 | 43 | 5 | 5 | 9 | 59 | 24 |
| 85 | 41 | 48 | 4 | 14 | 14 | 59 | 36 |
| 86 | 41 | 52 | 3 | 38 | 17 | 59 | 44 |
| 87 | 41 | 55 | 2 | 51 | 22 | 59 | 52 |
| 88 | 41 | 58 | 1 | 7 | 29 | 59 | 56 |
| 89 | 41 | 59 | 0 | 31 | 59 | 60 | 0 |
| 90 | 42 | 0 | 0 | 0 | 0 | 60 | 0 |

## 43

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 1 | 0 | 40 / 40 | 55 / 55 | 0 | 46 |
| 2 | 1 | 21 / 40 | 50 / 55 | 1 | 31 |
| 3 | 2 | 2 / 40 | 44 / 53 | 2 | 17 |
| 4 | 2 | 43 / 40 | 37 / 51 | 3 | 2 |
| 5 | 3 | 39 / 40 | 28 / 49 | 3 | 48 |
| 6 | 4 | 5 / 40 | 17 / 46 | 4 | 33 |
| 7 | 4 | 46 / 40 | 3 / 42 | 5 | 20 |
| 8 | 5 | 26 / 40 | 47 / 41 | 6 | 5 |
| 9 | 6 | 7 / 40 | 28 / 37 | 6 | 50 |
| 10 | 6 | 42 / 40 | 5 / 33 | 7 | 37 |
| 11 | 7 | 28 / 40 | 38 / 28 | 8 | 22 |
| 12 | 8 | 9 / 40 | 6 / 24 | 9 | 9 |
| 13 | 8 | 49 / 40 | 30 / 18 | 9 | 52 |
| 14 | 9 | 39 / 40 | 48 / 12 | 10 | 40 |
| 15 | 10 | 10 / 40 | 0 / 5 | 11 | 27 |
| 16 | 10 | 50 / 40 | 5 / 1 | 12 | 14 |
| 17 | 11 | 30 / 39 | 6 / 53 | 12 | 59 |
| 18 | 12 | 9 / 39 | 59 / 45 | 13 | 46 |
| 19 | 12 | 49 / 39 | 44 / 36 | 14 | 32 |
| 20 | 13 | 39 / 39 | 50 / 29 | 15 | 19 |
| 21 | 14 | 8 / 39 | 49 / 19 | 16 | 5 |
| 22 | 14 | 48 / 39 | 8 / 9 | 16 | 52 |
| 23 | 15 | 27 / 39 | 17 / 0 | 17 | 40 |
| 24 | 16 | 6 / 38 | 17 / 49 | 18 | 26 |
| 25 | 16 | 45 / 38 | 6 / 38 | 19 | 14 |
| 26 | 17 | 33 / 38 | 44 / 27 | 20 | 2 |
| 27 | 18 | 2 / 38 | 11 / 14 | 20 | 49 |
| 28 | 18 | 40 / 38 | 54 / 3 | 21 | 36 |
| 29 | 19 | 18 / 37 | 28 / 48 | 22 | 23 |
| 30 | 19 | 56 / 37 | 16 / 54 | 23 | 11 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 31 | 20 | 33 / 37 | 41 / 20 | 23 | 58 |
| 32 | 21 | 11 / 37 | 11 / 6 | 24 | 41 |
| 33 | 21 | 48 / 36 | 17 / 49 | 25 | 34 |
| 34 | 22 | 54 / 36 | 6 / 34 | 26 | 22 |
| 35 | 23 | 1 / 36 | 40 / 16 | 27 | 11 |
| 36 | 23 | 37 / 36 | 56 / 0 | 27 | 58 |
| 37 | 24 | 13 / 35 | 56 / 42 | 28 | 48 |
| 38 | 25 | 49 / 35 | 38 / 22 | 29 | 34 |
| 39 | 25 | 54 / 35 | 0 / 2 | 30 | 23 |
| 40 | 26 | 0 / 34 | 2 / 42 | 31 | 12 |
| 41 | 26 | 32 / 34 | 44 / 22 | 32 | 0 |
| 42 | 27 | 9 / 33 | 6 / 49 | 32 | 49 |
| 43 | 27 | 43 / 33 | 5 / 37 | 33 | 31 |
| 44 | 28 | 16 / 33 | 22 / 13 | 34 | 24 |
| 45 | 28 | 49 / 32 | 44 / 49 | 35 | 15 |
| 46 | 29 | 33 / 32 | 44 / 26 | 36 | 4 |
| 47 | 29 | 44 / 31 | 10 / 49 | 36 | 40 |
| 48 | 30 | 27 / 31 | 9 / 32 | 37 | 38 |
| 49 | 30 | 48 / 31 | 41 / 5 | 38 | 26 |
| 50 | 31 | 29 / 30 | 46 / 36 | 39 | 14 |
| 51 | 32 | 0 / 30 | 2 / 7 | 40 | 2 |
| 52 | 32 | 30 / 29 | 29 / 38 | 40 | 41 |
| 53 | 33 | 0 / 29 | 7 / 6 | 41 | 37 |
| 54 | 33 | 29 / 28 | 3 / 34 | 42 | 24 |
| 55 | 33 | 17 / 28 | 48 / 1 | 43 | 9 |
| 56 | 34 | 54 / 27 | 49 / 27 | 43 | 56 |
| 57 | 34 | 45 / 26 | 16 / 42 | 44 | 42 |
| 58 | 35 | 39 / 26 | 8 / 17 | 45 | 28 |
| 59 | 35 | 46 / 25 | 54 / 41 | 46 | 12 |
| 60 | 36 | 12 / 25 | 6 / 2 | 46 | 56 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 61 | 36 | 37 / 24 | 8 / 29 | 47 | 41 |
| 62 | 37 | 1 / 23 | 52 / 23 | 48 | 23 |
| 63 | 37 | 59 / 23 | 14 / 3 | 49 | 5 |
| 64 | 37 | 48 / 22 | 18 / 21 | 49 | 48 |
| 65 | 38 | 10 / 21 | 59 / 38 | 50 | 28 |
| 66 | 38 | 32 / 20 | 17 / 55 | 51 | 8 |
| 67 | 38 | 45 / 20 | 12 / 10 | 51 | 48 |
| 68 | 39 | 13 / 19 | 52 / 24 | 52 | 26 |
| 69 | 39 | 52 / 18 | 46 / 38 | 53 | 3 |
| 70 | 39 | 41 / 17 | 34 / 40 | 53 | 38 |
| 71 | 40 | 9 / 17 | 32 / 1 | 54 | 12 |
| 72 | 40 | 26 / 16 | 14 / 12 | 54 | 45 |
| 73 | 40 | 42 / 15 | 27 / 22 | 55 | 17 |
| 74 | 40 | 47 / 14 | 49 / 30 | 55 | 41 |
| 75 | 41 | 12 / 13 | 19 / 38 | 56 | 17 |
| 76 | 41 | 54 / 12 | 47 / 41 | 56 | 44 |
| 77 | 41 | 58 / 11 | 44 / 11 | 57 | 11 |
| 78 | 41 | 40 / 10 | 54 / 48 | 57 | 36 |
| 79 | 42 | 1 / 10 | 33 / 3 | 57 | 58 |
| 80 | 42 | 11 / 9 | 36 / 7 | 58 | 19 |
| 81 | 42 | 20 / 8 | 43 / 12 | 58 | 39 |
| 82 | 42 | 28 / 7 | 44 / 16 | 58 | 55 |
| 83 | 42 | 56 / 6 | 11 / 26 | 59 | 19 |
| 84 | 42 | 42 / 5 | 29 / 21 | 59 | 29 |
| 85 | 42 | 21 / 4 | 40 / 22 | 59 | 33 |
| 86 | 42 | 12 / 3 | 13 / 24 | 59 | 43 |
| 87 | 42 | 44 / 2 | 37 / 26 | 59 | 40 |
| 88 | 42 | 48 / 1 | 3 / 28 | 59 | 46 |
| 89 | 42 | 49 / 0 | 31 / 29 | 59 | 49 |
| 90 | 43 | 2 / 0 | 0 / 0 | 60 | 0 |

| | Azmuth | | | Dra | |
|---|---|---|---|---|---|
| | G | m | 2 | m | 2 |
| 1 | 0 | 41<br>41 | 41<br>40 | 0 | 45 |
| 2 | 1 | 32<br>41 | 21<br>40 | 1 | 30 |
| 3 | 2 | 5<br>41 | 1<br>38 | 2 | 14 |
| 4 | 2 | 46<br>41 | 39<br>37 | 2 | 59 |
| 5 | 3 | 28<br>41 | 16<br>34 | 3 | 44 |
| 6 | 4 | 9<br>41 | 50<br>33 | 4 | 29 |
| 7 | 4 | 51<br>41 | 23<br>29 | 5 | 14 |
| 8 | 5 | 32<br>41 | 52<br>27 | 5 | 59 |
| 9 | 6 | 14<br>41 | 19<br>23 | 6 | 44 |
| 10 | 6 | 55<br>41 | 43<br>18 | 7 | 29 |
| 11 | 7 | 37<br>41 | 0<br>14 | 8 | 14 |
| 12 | 8 | 18<br>41 | 14<br>9 | 8 | 59 |
| 13 | 8 | 59<br>41 | 24<br>4 | 9 | 44 |
| 14 | 9 | 40<br>40 | 28<br>59 | 10 | 30 |
| 15 | 10 | 51<br>40 | 27<br>52 | 11 | 15 |
| 16 | 11 | 2<br>40 | 19<br>46 | 12 | 2 |
| 17 | 11 | 43<br>40 | 5<br>40 | 12 | 48 |
| 18 | 12 | 33<br>40 | 45<br>31 | 13 | 32 |
| 19 | 13 | 4<br>40 | 16<br>23 | 14 | 19 |
| 20 | 13 | 44<br>40 | 39<br>15 | 15 | 5 |
| 21 | 14 | 24<br>40 | 44<br>6 | 15 | 51 |
| 22 | 15 | 5<br>39 | 0<br>57 | 16 | 37 |
| 23 | 15 | 44<br>39 | 57<br>46 | 17 | 23 |
| 24 | 16 | 24<br>39 | 43<br>37 | 18 | 10 |
| 25 | 17 | 4<br>39 | 20<br>26 | 18 | 56 |
| 26 | 17 | 43<br>39 | 46<br>12 | 19 | 42 |
| 27 | 18 | 23<br>39 | 0<br>1 | 20 | 28 |
| 28 | 19 | 2<br>38 | 1<br>50 | 21 | 14 |
| 29 | 19 | 40<br>38 | 41<br>36 | 22 | 4 |
| 30 | 20 | 17<br>36 | 27<br>22 | 22 | 40 |
| 31 | 20 | 57<br>36 | 49<br>9 | 23 | 38 |
| 32 | 21 | 54<br>37 | 48<br>43 | 24 | 25 |
| 33 | 22 | 13<br>37 | 41<br>37 | 25 | 13 |
| 34 | 22 | 51<br>37 | 28<br>23 | 26 | 1 |
| 35 | 23 | 28<br>37 | 51<br>3 | 26 | 47 |
| 36 | 24 | 5<br>36 | 54<br>50 | 27 | 37 |
| 37 | 24 | 43<br>36 | 44<br>28 | 28 | 33 |
| 38 | 25 | 19<br>36 | 13<br>18 | 29 | 13 |
| 39 | 25 | 54<br>35 | 33<br>11 | 30 | 0 |
| 40 | 26 | 34<br>35 | 14<br>40 | 30 | 48 |
| 41 | 27 | 6<br>35 | 44<br>10 | 31 | 37 |
| 42 | 27 | 41<br>35 | 44<br>48 | 32 | 25 |
| 43 | 28 | 16<br>34 | 43<br>24 | 33 | 13 |
| 44 | 28 | 51<br>34 | 7<br>3 | 34 | 3 |
| 45 | 29 | 25<br>33 | 10<br>38 | 34 | 50 |
| 46 | 29 | 58<br>33 | 48<br>12 | 35 | 38 |
| 47 | 30 | 32<br>32 | 0<br>47 | 36 | 23 |
| 48 | 31 | 4<br>32 | 47<br>20 | 37 | 16 |
| 49 | 31 | 37<br>31 | 7<br>45 | 38 | 4 |
| 50 | 32 | 9<br>31 | 0<br>24 | 38 | 53 |
| 51 | 33 | 40<br>30 | 24<br>46 | 39 | 40 |
| 52 | 33 | 11<br>30 | 20<br>24 | 40 | 27 |
| 53 | 33 | 41<br>29 | 44<br>53 | 41 | 14 |
| 54 | 34 | 11<br>29 | 37<br>20 | 42 | 2 |
| 55 | 34 | 40<br>28 | 57<br>48 | 42 | 49 |
| 56 | 35 | 9<br>28 | 44<br>13 | 43 | 35 |
| 57 | 35 | 37<br>27 | 48<br>38 | 44 | 23 |
| 58 | 36 | 5<br>27 | 36<br>1 | 45 | 9 |
| 59 | 36 | 32<br>26 | 37<br>25 | 45 | 54 |
| 60 | 36 | 59<br>25 | 2<br>47 | 46 | 38 |
| 61 | 37 | 24<br>24 | 29<br>6 | 47 | 22 |
| 62 | 37 | 49<br>24 | 54<br>26 | 48 | 6 |
| 63 | 38 | 14<br>23 | 21<br>45 | 48 | 49 |
| 64 | 38 | 38<br>23 | 6<br>1 | 49 | 32 |
| 65 | 39 | 1<br>22 | 7<br>18 | 50 | 14 |
| 66 | 39 | 33<br>21 | 25<br>35 | 50 | 55 |
| 67 | 39 | 45<br>20 | 0<br>48 | 51 | 33 |
| 68 | 40 | 5<br>20 | 48<br>1 | 52 | 12 |
| 69 | 40 | 54<br>19 | 49<br>13 | 52 | 49 |
| 70 | 40 | 45<br>18 | 2<br>24 | 53 | 26 |
| 71 | 41 | 3<br>17 | 26<br>35 | 54 | 2 |
| 72 | 41 | 27<br>16 | 1<br>43 | 54 | 35 |
| 73 | 41 | 37<br>15 | 44<br>52 | 55 | 10 |
| 74 | 41 | 53<br>14 | 36<br>0 | 55 | 41 |
| 75 | 42 | 8<br>14 | 36<br>5 | 56 | 11 |
| 76 | 43 | 22<br>13 | 41<br>14 | 56 | 40 |
| 77 | 43 | 35<br>12 | 45<br>16 | 57 | 4 |
| 78 | 43 | 48<br>11 | 11<br>20 | 57 | 30 |
| 79 | 43 | 49<br>10 | 30<br>29 | 57 | 53 |
| 80 | 43 | 9<br>9 | 54<br>21 | 58 | 15 |
| 81 | 43 | 19<br>8 | 22<br>28 | 58 | 34 |
| 82 | 43 | 27<br>7 | 40<br>30 | 58 | 52 |
| 83 | 43 | 54<br>6 | 20<br>32 | 59 | 8 |
| 84 | 43 | 41<br>4 | 42<br>31 | 59 | 21 |
| 85 | 43 | 47<br>4 | 23<br>32 | 59 | 33 |
| 86 | 43 | 51<br>3 | 54<br>22 | 59 | 43 |
| 87 | 43 | 54<br>2 | 27<br>32 | 59 | 50 |
| 88 | 43 | 57<br>1 | 59<br>31 | 59 | 54 |
| 89 | 43 | 59<br>0 | 30<br>30 | 59 | 58 |
| 90 | 44 | 0<br>0 | 0<br>0 | 60 | 0 |

45

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | g | m | 2 | dy | 2 |
| 1 | 0 | 42 / 42 | 26 / 25 | 0 | 44 |
| 2 | 1 | 24 / 42 | 51 / 24 | 1 | 28 |
| 3 | 2 | 7 / 42 | 15 / 23 | 2 | 12 |
| 4 | 2 | 49 / 42 | 38 / 22 | 2 | 57 |
| 5 | 3 | 32 / 42 | 0 / 19 | 3 | 40 |
| 6 | 4 | 44 / 42 | 19 / 18 | 4 | 25 |
| 7 | 4 | 56 / 42 | 37 / 14 | 5 | 8 |
| 8 | 5 | 38 / 42 | 51 / 12 | 5 | 53 |
| 9 | 6 | 21 / 42 | 3 / 8 | 6 | 37 |
| 10 | 7 | 3 / 42 | 11 / 4 | 7 | 21 |
| 11 | 7 | 44 / 41 | 15 / 49 | 8 | 6 |
| 12 | 8 | 27 / 41 | 14 / 54 | 8 | 51 |
| 13 | 9 | 9 / 41 | 9 / 49 | 9 | 35 |
| 14 | 9 | 50 / 41 | 58 / 44 | 10 | 20 |
| 15 | 10 | 32 / 41 | 42 / 39 | 11 | 5 |
| 16 | 11 | 14 / 41 | 22 / 32 | 11 | 49 |
| 17 | 11 | 55 / 41 | 53 / 24 | 12 | 34 |
| 18 | 12 | 37 / 41 | 17 / 18 | 13 | 20 |
| 19 | 13 | 18 / 41 | 35 / 9 | 14 | 4 |
| 20 | 13 | 59 / 41 | 44 / 1 | 14 | 50 |
| 21 | 14 | 40 / 40 | 45 / 52 | 15 | 35 |
| 22 | 15 | 21 / 40 | 27 / 43 | 16 | 21 |
| 23 | 16 | 2 / 40 | 20 / 33 | 17 | 6 |
| 24 | 16 | 42 / 40 | 53 / 23 | 17 | 52 |
| 25 | 17 | 23 / 40 | 16 / 12 | 18 | 38 |
| 26 | 18 | 3 / 40 | 28 / 0 | 19 | 24 |
| 27 | 18 | 43 / 39 | 28 / 50 | 20 | 10 |
| 28 | 19 | 23 / 39 | 18 / 37 | 20 | 57 |
| 29 | 20 | 3 / 39 | 44 / 22 | 21 | 43 |
| 30 | 20 | 43 / 39 | 17 / 10 | 22 | 31 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | g | m | 2 | dy | 2 |
| 31 | 21 | 21 / 38 | 27 / 56 | 23 | 18 |
| 32 | 22 | 0 / 38 | 33 / 51 | 24 | 0 |
| 33 | 22 | 39 / 38 | 4 / 21 | 24 | 51 |
| 34 | 23 | 17 / 38 | 29 / 9 | 25 | 39 |
| 35 | 23 | 55 / 37 | 28 / 53 | 26 | 27 |
| 36 | 24 | 33 / 37 | 21 / 36 | 27 | 15 |
| 37 | 25 | 11 / 37 | 7 / 18 | 28 | 2 |
| 38 | 25 | 48 / 36 | 25 / 58 | 28 | 49 |
| 39 | 26 | 25 / 36 | 23 / 39 | 29 | 37 |
| 40 | 27 | 2 / 36 | 2 / 19 | 30 | 25 |
| 41 | 27 | 38 / 35 | 21 / 58 | 31 | 13 |
| 42 | 28 | 14 / 35 | 19 / 36 | 32 | 1 |
| 43 | 28 | 49 / 35 | 55 / 14 | 32 | 49 |
| 44 | 29 | 25 / 34 | 10 / 50 | 33 | 38 |
| 45 | 30 | 4 / 34 | 0 / 26 | 34 | 26 |
| 46 | 30 | 34 / 34 | 26 / 1 | 35 | 14 |
| 47 | 31 | 8 / 33 | 27 / 36 | 36 | 3 |
| 48 | 31 | 42 / 33 | 3 / 8 | 36 | 50 |
| 49 | 32 | 14 / 32 | 11 / 42 | 37 | 39 |
| 50 | 32 | 47 / 32 | 45 / 11 | 38 | 27 |
| 51 | 33 | 20 / 31 | 4 / 33 | 39 | 16 |
| 52 | 33 | 51 / 31 | 47 / 11 | 40 | 3 |
| 53 | 34 | 22 / 30 | 33 / 41 | 40 | 52 |
| 54 | 34 | 53 / 30 | 39 / 7 | 41 | 39 |
| 55 | 35 | 23 / 29 | 33 / 32 | 42 | 27 |
| 56 | 35 | 53 / 29 | 50 / 1 | 43 | 15 |
| 57 | 36 | 22 / 28 | 21 / 32 | 44 | 0 |
| 58 | 36 | 50 / 27 | 54 / 26 | 44 | 46 |
| 59 | 37 | 18 / 27 | 21 / 9 | 45 | 33 |
| 60 | 37 | 45 / 26 | 40 / 31 | 46 | 19 |

| | Arcus diei | | | | |
|---|---|---|---|---|---|
| | g | m | 2 | dy | 2 |
| 61 | 38 | 12 / 25 | 11 / 50 | 47 | 3 |
| 62 | 38 | 38 / 25 | 7 / 9 | 47 | 47 |
| 63 | 39 | 3 / 24 | 10 / 28 | 48 | 33 |
| 64 | 39 | 27 / 23 | 38 / 43 | 49 | 14 |
| 65 | 39 | 51 / 22 | 27 / 59 | 49 | 57 |
| 66 | 40 | 14 / 22 | 20 / 13 | 50 | 38 |
| 67 | 40 | 36 / 21 | 33 / 27 | 51 | 19 |
| 68 | 40 | 58 / 20 | 0 / 38 | 51 | 57 |
| 69 | 41 | 18 / 19 | 38 / 50 | 52 | 37 |
| 70 | 41 | 38 / 19 | 28 / 0 | 53 | 15 |
| 71 | 41 | 57 / 18 | 38 / 8 | 53 | 51 |
| 72 | 42 | 15 / 17 | 36 / 18 | 54 | 27 |
| 73 | 42 | 32 / 16 | 44 / 23 | 54 | 59 |
| 74 | 42 | 49 / 14 | 17 / 30 | 55 | 32 |
| 75 | 43 | 4 / 12 | 47 / 39 | 56 | 2 |
| 76 | 43 | 19 / 13 | 21 / 38 | 56 | 31 |
| 77 | 43 | 32 / 12 | 59 / 42 | 56 | 59 |
| 78 | 43 | 45 / 11 | 41 / 43 | 57 | 24 |
| 79 | 43 | 57 / 10 | 32 / 46 | 57 | 49 |
| 80 | 44 | 8 / 9 | 10 / 46 | 58 | 10 |
| 81 | 44 | 17 / 8 | 56 / 46 | 58 | 32 |
| 82 | 44 | 26 / 7 | 42 / 46 | 58 | 51 |
| 83 | 44 | 34 / 6 | 28 / 44 | 59 | 7 |
| 84 | 44 | 47 / 5 | 13 / 43 | 59 | 21 |
| 85 | 44 | 46 / 4 | 56 / 44 | 59 | 33 |
| 86 | 44 | 51 / 3 | 28 / 39 | 59 | 43 |
| 87 | 44 | 54 / 2 | 17 / 36 | 59 | 50 |
| 88 | 44 | 57 / 1 | 53 / 34 | 59 | 57 |
| 89 | 44 | 59 / 0 | 28 / 32 | 60 | 0 |
| 90 | 45 | 0 | 0 | 6 | |

| | Arcus | | | diei | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 1 | 0 | 43 / 43 | 10 / 9 | 0 | 43 |
| 2 | 1 | 26 / 43 | 19 / 8 | 1 | 26 |
| 3 | 2 | 9 / 43 | 27 / 8 | 2 | 10 |
| 4 | 2 | 52 / 43 | 35 / 5 | 2 | 53 |
| 5 | 3 | 35 / 43 | 40 / 4 | 3 | 37 |
| 6 | 4 | 18 / 43 | 44 / 1 | 4 | 20 |
| 7 | 5 | 1 / 42 | 45 / 49 | 5 | 4 |
| 8 | 5 | 44 / 42 | 47 / 46 | 5 | 47 |
| 9 | 6 | 27 / 42 | 40 / 42 | 6 | 30 |
| 10 | 7 | 10 / 42 | 33 / 39 | 7 | 14 |
| 11 | 7 | 53 / 42 | 27 / 44 | 7 | 57 |
| 12 | 8 | 36 / 42 | 5 / 39 | 8 | 41 |
| 13 | 9 | 18 / 42 | 44 / 34 | 9 | 25 |
| 14 | 10 | 1 / 42 | 18 / 29 | 10 | 5 |
| 15 | 10 | 43 / 42 | 47 / 23 | 10 | 53 |
| 16 | 11 | 26 / 42 | 10 / 17 | 11 | 37 |
| 17 | 12 | 8 / 42 | 27 / 10 | 12 | 22 |
| 18 | 12 | 50 / 42 | 37 / 2 | 13 | 6 |
| 19 | 13 | 32 / 41 | 39 / 54 | 13 | 50 |
| 20 | 14 | 14 / 41 | 34 / 46 | 14 | 34 |
| 21 | 14 | 56 / 41 | 20 / 38 | 15 | 20 |
| 22 | 15 | 37 / 41 | 48 / 28 | 16 | 4 |
| 23 | 16 | 19 / 41 | 26 / 19 | 16 | 50 |
| 24 | 17 | 0 / 41 | 45 / 9 | 17 | 35 |
| 25 | 17 | 41 / 40 | 54 / 58 | 18 | 20 |
| 26 | 18 | 22 / 40 | 52 / 48 | 19 | 5 |
| 27 | 19 | 3 / 40 | 40 / 35 | 19 | 51 |
| 28 | 19 | 44 / 40 | 15 / 23 | 20 | 38 |
| 29 | 20 | 24 / 40 | 38 / 10 | 21 | 23 |
| 30 | 21 | 4 / 39 | 48 / 57 | 22 | 9 |

| | Arcus | | | diei | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 31 | 21 | 44 / 39 | 45 / 44 | 22 | 44 |
| 32 | 22 | 24 / 39 | 29 / 26 | 23 | 40 |
| 33 | 23 | 3 / 39 | 55 / 13 | 24 | 29 |
| 34 | 23 | 43 / 38 | 8 / 57 | 25 | 16 |
| 35 | 24 | 22 / 38 | 5 / 47 | 26 | 3 |
| 36 | 25 | 0 / 38 | 46 / 33 | 26 | 50 |
| 37 | 25 | 39 / 38 | 9 / 5 | 27 | 37 |
| 38 | 26 | 17 / 37 | 14 / 46 | 28 | 25 |
| 39 | 26 | 55 / 37 | 0 / 27 | 29 | 13 |
| 40 | 27 | 33 / 37 | 37 / 7 | 30 | 1 |
| 41 | 28 | 9 / 36 | 34 / 40 | 30 | 49 |
| 42 | 28 | 46 / 36 | 30 / 24 | 31 | 36 |
| 43 | 29 | 22 / 36 | 44 / 4 | 32 | 26 |
| 44 | 29 | 58 / 35 | 48 / 38 | 33 | 12 |
| 45 | 30 | 34 / 35 | 26 / 14 | 34 | 1 |
| 46 | 31 | 9 / 34 | 41 / 49 | 34 | 49 |
| 47 | 31 | 44 / 34 | 30 / 23 | 35 | 38 |
| 48 | 32 | 18 / 33 | 43 / 57 | 36 | 28 |
| 49 | 32 | 52 / 33 | 40 / 30 | 37 | 16 |
| 50 | 33 | 25 / 33 | 20 / 0 | 38 | 4 |
| 51 | 33 | 59 / 32 | 50 / 30 | 38 | 52 |
| 52 | 34 | 31 / 32 | 40 / 0 | 39 | 40 |
| 53 | 35 | 3 / 31 | 40 / 28 | 40 | 28 |
| 54 | 35 | 35 / 30 | 18 / 44 | 41 | 17 |
| 55 | 36 | 6 / 30 | 13 / 22 | 42 | 4 |
| 56 | 36 | 36 / 29 | 57 / 46 | 42 | 51 |
| 57 | 37 | 6 / 29 | 21 / 10 | 43 | 38 |
| 58 | 37 | 35 / 28 | 31 / 33 | 44 | 24 |
| 59 | 38 | 4 / 27 | 4 / 44 | 45 | 12 |
| 60 | 38 | 31 / 27 | 49 / 14 | 45 | 48 |

| | Arcus | | | diei | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 61 | 38 | 58 / 26 | 14 / 34 | 46 | 44 |
| 62 | 39 | 24 / 25 | 48 / 54 | 47 | 30 |
| 63 | 39 | 49 / 24 | 43 / 9 | 48 | 13 |
| 64 | 40 | 14 / 24 | 52 / 26 | 48 | 57 |
| 65 | 40 | 37 / 23 | 18 / 40 | 49 | 40 |
| 66 | 41 | 0 / 22 | 58 / 54 | 50 | 23 |
| 67 | 41 | 22 / 22 | 52 / 5 | 51 | 4 |
| 68 | 41 | 44 / 21 | 57 / 18 | 51 | 46 |
| 69 | 42 | 5 / 20 | 15 / 28 | 52 | 25 |
| 70 | 42 | 25 / 19 | 43 / 36 | 53 | 3 |
| 71 | 42 | 51 / 18 | 19 / 44 | 53 | 40 |
| 72 | 43 | 10 / 17 | 3 / 50 | 54 | [illegible] |
| 73 | 43 | 27 / 16 | 53 / 56 | 54 | 50 |
| 74 | 43 | 44 / 16 | 49 / 0 | 55 | 23 |
| 75 | 44 | 0 / 14 | 49 / 3 | 55 | 42 |
| 76 | 44 | 14 / 14 | 42 / 6 | 56 | 27 |
| 77 | 44 | 29 / 13 | 48 / 7 | 56 | 54 |
| 78 | 44 | 42 / 12 | 5 / 8 | 57 | 21 |
| 79 | 44 | 55 / 11 | 13 / 7 | 57 | 46 |
| 80 | 45 | 6 / 10 | 20 / 8 | 58 | 9 |
| 81 | 45 | 16 / 9 | 28 / 4 | 58 | 28 |
| 82 | 45 | 25 / 8 | 33 / 2 | 58 | 46 |
| 83 | 45 | 33 / 6 | 51 / 49 | 59 | 3 |
| 84 | 45 | 40 / 5 | 54 / 44 | 59 | 18 |
| 85 | 45 | 46 / 4 | 29 / 42 | 59 | 31 |
| 86 | 45 | 51 / 3 | 7 / 46 | 59 | 41 |
| 87 | 45 | 55 / 2 | 7 / 43 | 59 | 50 |
| 88 | 45 | 57 / 1 | 50 / 38 | 59 | 55 |
| 89 | 45 | 59 / 0 | 28 / 32 | 59 | 58 |
| 90 | 46 | 0 / 0 | 0 / 0 | 60 | 0 |

41

[illegible] [illegible]

|  | G | M | 2 | m | 2 |
|---|---|---|---|---|---|
| 1 | 0 | 43<br>43 | 13<br>52 | 0 | 42 |
| 2 | 1 | 27<br>43 | 45<br>52 | 1 | 25 |
| 3 | 2 | 11<br>43 | 37<br>51 | 2 | 7 |
| 4 | 3 | 55<br>43 | 28<br>49 | 2 | 49 |
| 5 | 3 | 39<br>43 | 17<br>47 | 3 | 22 |
| 6 | 4 | 23<br>43 | 4<br>45 | 4 | 15 |
| 7 | 5 | 6<br>43 | 49<br>42 | 4 | 57 |
| 8 | 5 | 50<br>43 | 21<br>39 | 5 | 40 |
| 9 | 6 | 34<br>43 | 10<br>36 | 6 | 23 |
| 10 | 7 | 17<br>43 | 40<br>32 | 7 | 6 |
| 11 | 8 | 1<br>43 | 18<br>28 | 7 | 49 |
| 12 | 8 | 44<br>42 | 46<br>23 | 8 | 32 |
| 13 | 9 | 28<br>42 | 9<br>18 | 9 | 15 |
| 14 | 10 | 11<br>42 | 27<br>13 | 9 | 58 |
| 15 | 10 | 59<br>42 | 40<br>1 | 10 | 41 |
| 16 | 11 | 37<br>43 | 47<br>2 | 11 | 25 |
| 17 | 12 | 20<br>42 | 49<br>54 | 12 | 8 |
| 18 | 13 | 2<br>42 | 43<br>46 | 12 | 51 |
| 19 | 13 | 46<br>42 | 29<br>39 | 13 | 26 |
| 20 | 14 | 29<br>42 | 8<br>32 | 14 | 20 |
| 21 | 14 | 11<br>42 | 40<br>22 | 14 | 3 |
| 22 | 15 | 54<br>42 | 2<br>14 | 15 | 48 |
| 23 | 16 | 36<br>42 | 16<br>4 | 16 | 32 |
| 24 | 17 | 18<br>41 | 20<br>54 | 17 | 17 |
| 25 | 18 | 0<br>41 | 14<br>43 | 18 | 2 |
| 26 | 18 | 41<br>41 | 57<br>34 | 18 | 48 |
| 27 | 19 | 23<br>41 | 31<br>22 | 19 | 31 |
| 28 | 20 | 4<br>41 | 53<br>8 | 20 | 16 |
| 29 | 20 | 46<br>40 | 1<br>56 | 21 | 2 |
| 30 | 21 | 26<br>40 | 57<br>43 | 21 | 48 |
| 31 | 22 | 7<br>40 | 40<br>29 | 22 | 35 |
| 32 | 22 | 48<br>40 | 9<br>14 | 23 | 20 |
| 33 | 23 | 28<br>40 | 24<br>0 | 24 | 6 |
| 34 | 24 | 8<br>39 | 24<br>44 | 24 | 42 |
| 35 | 24 | 48<br>39 | 8<br>28 | 25 | 40 |
| 36 | 25 | 27<br>39 | 26<br>10 | 26 | 26 |
| 37 | 26 | 6<br>38 | 46<br>53 | 27 | 13 |
| 38 | 26 | 45<br>38 | 39<br>34 | 28 | 0 |
| 39 | 27 | 24<br>38 | 13<br>14 | 28 | 48 |
| 40 | 28 | 2<br>37 | 28<br>44 | 29 | 35 |
| 41 | 28 | 40<br>37 | 3<br>33 | 30 | 24 |
| 42 | 29 | 17<br>37 | 46<br>14 | 31 | 12 |
| 43 | 29 | 55<br>36 | 10<br>50 | 31 | 59 |
| 44 | 30 | 32<br>36 | 0<br>27 | 32 | 47 |
| 45 | 31 | 8<br>36 | 27<br>3 | 33 | 36 |
| 46 | 31 | 44<br>35 | 30<br>58 | 34 | 23 |
| 47 | 32 | 20<br>35 | 8<br>13 | 35 | 13 |
| 48 | 32 | 55<br>34 | 21<br>45 | 36 | 1 |
| 49 | 33 | 30<br>34 | 6<br>17 | 36 | 49 |
| 50 | 34 | 4<br>33 | 23<br>49 | 37 | 37 |
| 51 | 34 | 38<br>33 | 12<br>18 | 38 | 25 |
| 52 | 35 | 11<br>32 | 30<br>48 | 39 | 14 |
| 53 | 35 | 44<br>32 | 18<br>7 | 40 | 4 |
| 54 | 36 | 16<br>31 | 54<br>42 | 40 | 51 |
| 55 | 36 | 48<br>31 | 17<br>19 | 41 | 40 |
| 56 | 37 | 19<br>30 | 26<br>33 | 42 | 27 |
| 57 | 37 | 49<br>29 | 49<br>57 | 43 | 16 |
| 58 | 38 | 19<br>29 | 46<br>20 | 44 | 3 |
| 59 | 38 | 49<br>28 | 16<br>41 | 44 | 50 |
| 60 | 39 | 17<br>28 | 57<br>2 | 45 | 37 |
| 61 | 39 | 45<br>21 | 59<br>19 | 46 | 23 |
| 62 | 40 | 15<br>26 | 18<br>38 | 47 | 9 |
| 63 | 40 | 29<br>21 | 56<br>53 | 47 | 53 |
| 64 | 41 | 5<br>21 | 49<br>9 | 48 | 39 |
| 65 | 41 | 30<br>32 | 58<br>23 | 49 | 23 |
| 66 | 41 | 55<br>23 | 21<br>34 | 50 | 6 |
| 67 | 42 | 18<br>22 | 56<br>47 | 50 | 49 |
| 68 | 42 | 41<br>21 | 43<br>57 | 51 | 30 |
| 69 | 43 | 3<br>21 | 40<br>6 | 52 | 10 |
| 70 | 43 | 24<br>20 | 46<br>13 | 52 | 49 |
| 71 | 43 | 44<br>19 | 59<br>19 | 53 | 27 |
| 72 | 44 | 4<br>18 | 18<br>25 | 54 | 4 |
| 73 | 44 | 22<br>17 | 43<br>29 | 54 | 40 |
| 74 | 44 | 40<br>16 | 12<br>31 | 55 | 14 |
| 75 | 44 | 56<br>15 | 43<br>34 | 55 | 47 |
| 76 | 45 | 12<br>14 | 17<br>35 | 56 | 18 |
| 77 | 45 | 26<br>13 | 52<br>34 | 56 | 46 |
| 78 | 45 | 40<br>12 | 26<br>33 | 57 | 13 |
| 79 | 45 | 52<br>11 | 59<br>30 | 57 | 38 |
| 80 | 46 | 4<br>10 | 29<br>27 | 58 | 2 |
| 81 | 46 | 14<br>9 | 46<br>23 | 58 | 29 |
| 82 | 46 | 24<br>8 | 19<br>19 | 58 | 45 |
| 83 | 46 | 33<br>7 | 38<br>14 | 59 | 3 |
| 84 | 46 | 39<br>6 | 53<br>8 | 59 | 17 |
| 85 | 46 | 46<br>5 | 0<br>2 | 59 | 30 |
| 86 | 47 | 51<br>3 | 2<br>55 | 59 | 40 |
| 87 | 46 | 54<br>2 | 57<br>48 | 59 | 49 |
| 88 | 46 | 57<br>1 | 45<br>41 | 59 | 54 |
| 89 | 46 | 59<br>0 | 26<br>30 | 59 | 58 |
| 90 | 47 | 0<br>0 | 0<br>0 | 60 | 0 |

| Arcus | s | m | 2 | dia ms |
|---|---|---|---|---|
| 1 | 0 | 44 / 44 | 34 / 34 | 0 42 |
| 2 | 1 | 29 / 44 | 10 / 34 | 1 24 |
| 3 | 2 | 13 / 44 | 44 / 33 | 2 5 |
| 4 | 2 | 58 / 44 | 17 / 32 | 2 47 |
| 5 | 3 | 42 / 44 | 49 / 30 | 3 38 |
| 6 | 4 | 27 / 44 | 19 / 27 | 4 19 |
| 7 | 5 | 11 / 44 | 46 / 25 | 4 54 |
| 8 | 5 | 56 / 44 | 11 / 22 | 5 34 |
| 9 | 6 | 40 / 44 | 33 / 19 | 6 13 |
| 10 | 7 | 24 / 44 | 53 / 14 | 6 58 |
| 11 | 8 | 9 / 44 | 7 / 11 | 7 49 |
| 12 | 8 | 53 / 44 | 18 / 6 | 8 22 |
| 13 | 9 | 37 / 44 | 24 / 1 | 9 [illegible] |
| 14 | 10 | 21 / 43 | 25 / 56 | 9 43 |
| 15 | 11 | 5 / 43 | 21 / 51 | 10 39 |
| 16 | 11 | 49 / 43 | 12 / 44 | 11 13 |
| 17 | 12 | 32 / 43 | 57 / 37 | 11 54 |
| 18 | 13 | 16 / 43 | 34 / 31 | 12 38 |
| 19 | 14 | 0 / 43 | 5 / 23 | 13 21 |
| 20 | 14 | 43 / 43 | 28 / 14 | 14 4 |
| 21 | 15 | 26 / 43 | 43 / 7 | 14 48 |
| 22 | 16 | 9 / 42 | 50 / 58 | 15 31 |
| 23 | 16 | 52 / 42 | 48 / 49 | 16 14 |
| 24 | 17 | 34 / 42 | 37 / 39 | 16 58 |
| 25 | 18 | 18 / 42 | 16 / 29 | 17 43 |
| 26 | 19 | 0 / 42 | 44 / 17 | 18 27 |
| 27 | 19 | 43 / 42 | 2 / 7 | 19 12 |
| 28 | 20 | 54 / 41 | 9 / 54 | 19 56 |
| 29 | 21 | 7 / 41 | 3 / 40 | 20 42 |
| 30 | 21 | 48 / 41 | 44 / 27 | 21 27 |
| 31 | 22 | 30 / 41 | 14 / 15 | 22 14 |
| 32 | 23 | 11 / 41 | 29 / 1 | 22 58 |
| 33 | 23 | 52 / 40 | 30 / 46 | 23 42 |
| 34 | 24 | 33 / 40 | 16 / 32 | 24 30 |
| 35 | 25 | 13 / 40 | 48 / 14 | 25 14 |
| 36 | 25 | 54 / 39 | 2 / 57 | 26 1 |
| 37 | 26 | 33 / 39 | 59 / 40 | 26 48 |
| 38 | 27 | 13 / 39 | 39 / 22 | 27 34 |
| 39 | 27 | 53 / 39 | 1 / 2 | 28 32 |
| 40 | 28 | 33 / 38 | 3 / 44 | 29 10 |
| 41 | 29 | 10 / 38 | 47 / 21 | 29 56 |
| 42 | 29 | 47 / 38 | 8 / 1 | 30 44 |
| 43 | 30 | 27 / 37 | 9 / 38 | 31 32 |
| 44 | 31 | 4 / 37 | 47 / 16 | 32 20 |
| 45 | 31 | 42 / 36 | 3 / 40 | 33 8 |
| 46 | 32 | 18 / 36 | 43 / 28 | 33 57 |
| 47 | 32 | 54 / 36 | 21 / 1 | 34 44 |
| 48 | 33 | 31 / 35 | 22 / 33 | 35 33 |
| 49 | 34 | 6 / 35 | 55 / 6 | 36 22 |
| 50 | 34 | 42 / 34 | 1 / 36 | 37 11 |
| 51 | 35 | 16 / 34 | 37 / 7 | 38 0 |
| 52 | 35 | 40 / 33 | 44 / 38 | 38 40 |
| 53 | 36 | 52 / 33 | 22 / 4 | 39 37 |
| 54 | 36 | 57 / 32 | 56 / 31 | 40 26 |
| 55 | 37 | 29 / 31 | 57 / 45 | 41 14 |
| 56 | 38 | 1 / 31 | 53 / 22 | 42 3 |
| 57 | 38 | 33 / 30 | 14 / 44 | 42 51 |
| 58 | 39 | 3 / 30 | 49 / 7 | 43 40 |
| 59 | 39 | 34 / 29 | 6 / 28 | 44 27 |
| 60 | 40 | 3 / 28 | 34 / 48 | 45 14 |
| 61 | 40 | 33 / 28 | 22 / 5 | 46 1 |
| 62 | 41 | 0 / 27 | 27 / 22 | 46 48 |
| 63 | 41 | 27 / 26 | 45 / 39 | 47 34 |
| 64 | 41 | 54 / 25 | 28 / 43 | 48 20 |
| 65 | 42 | 20 / 24 | 21 / 6 | 49 4 |
| 66 | 42 | 45 / 24 | 27 / 18 | 49 48 |
| 67 | 43 | 9 / 23 | 45 / 28 | 50 31 |
| 68 | 43 | 33 / 22 | 13 / 37 | 51 13 |
| 69 | 43 | 55 / 21 | 40 / 44 | 51 54 |
| 70 | 44 | 17 / 20 | 35 / 51 | 52 35 |
| 71 | 44 | 38 / 19 | 36 / 56 | 53 14 |
| 72 | 44 | 58 / 19 | 22 / 1 | 53 53 |
| 73 | 45 | 17 / 18 | 33 / 3 | 54 29 |
| 74 | 45 | 35 / 17 | 26 / 4 | 55 4 |
| 75 | 45 | 52 / 16 | 30 / 5 | 55 37 |
| 76 | 46 | 8 / 14 | 35 / 3 | 56 8 |
| 77 | 46 | 23 / 12 | 38 / 1 | 56 39 |
| 78 | 46 | 37 / 12 | 39 / 58 | 57 8 |
| 79 | 46 | 50 / 11 | 37 / 54 | 57 35 |
| 80 | 47 | 2 / 10 | 31 / 47 | 58 0 |
| 81 | 47 | 13 / 9 | 20 / 44 | 58 23 |
| 82 | 47 | 23 / 8 | 4 / 37 | 58 42 |
| 83 | 47 | 31 / 7 | 41 / 28 | 59 0 |
| 84 | 47 | 39 / 6 | 9 / 21 | 59 16 |
| 85 | 47 | 45 / 5 | 30 / 12 | 59 30 |
| 86 | 47 | 50 / 4 | 42 / 9 | 59 42 |
| 87 | 47 | 54 / 2 | 46 / 43 | 59 49 |
| 88 | 47 | 57 / 1 | 39 / 44 | 59 56 |
| 89 | 47 | 59 / 0 | 24 / 36 | 60 0 |
| 90 | 48 | 0 / 0 | 0 / 0 | 60 0 |

| | Arcus | | | Dra | |
|---|---|---|---|---|---|
| | G | m | 2 | m | 2 |
| 1 | 0 | 45<br>45 | 17<br>17 | 0 | 41 |
| 2 | 1 | 30<br>45 | 34<br>15 | 1 | 21 |
| 3 | 2 | 15<br>45 | 49<br>15 | 2 | 3 |
| 4 | 3 | 1<br>45 | 4<br>13 | 2 | 43 |
| 5 | 3 | 46<br>45 | 17<br>12 | 3 | 25 |
| 6 | 4 | 31<br>45 | 39<br>9 | 4 | 41 |
| 7 | 5 | 16<br>45 | 38<br>7 | 4 | 46 |
| 8 | 6 | 1<br>45 | 45<br>4 | 5 | 21 |
| 9 | 6 | 46<br>45 | 49<br>1 | 6 | 8 |
| 10 | 7 | 31<br>44 | 50<br>56 | 6 | 49 |
| 11 | 8 | 16<br>44 | 46<br>52 | 7 | 32 |
| 12 | 9 | 1<br>44 | 40<br>48 | 8 | 12 |
| 13 | 9 | 46<br>44 | 38<br>44 | 8 | 54 |
| 14 | 10 | 31<br>44 | 12<br>38 | 9 | 35 |
| 15 | 11 | 15<br>44 | 50<br>35 | 10 | 18 |
| 16 | 12 | 0<br>44 | 25<br>27 | 10 | 59 |
| 17 | 12 | 44<br>44 | 42<br>20 | 11 | 41 |
| 18 | 13 | 29<br>44 | 12<br>14 | 12 | 23 |
| 19 | 14 | 13<br>44 | 26<br>6 | 13 | 5 |
| 20 | 14 | 57<br>43 | 22<br>59 | 13 | 48 |
| 21 | 15 | 41<br>43 | 31<br>50 | 14 | 31 |
| 22 | 16 | 54<br>43 | 21<br>42 | 15 | 14 |
| 23 | 17 | 9<br>43 | 3<br>32 | 15 | 56 |
| 24 | 17 | 52<br>43 | 35<br>24 | 16 | 41 |
| 25 | 18 | 35<br>43 | 59<br>13 | 17 | 23 |
| 26 | 19 | 19<br>43 | 12<br>2 | 18 | 8 |
| 27 | 20 | 2<br>42 | 14<br>51 | 18 | 51 |
| 28 | 20 | 45<br>42 | 5<br>40 | 19 | 35 |
| 29 | 21 | 27<br>42 | 45<br>27 | 20 | 19 |
| 30 | 22 | 10<br>42 | 12<br>14 | 21 | 4 |
| 31 | 22 | 52<br>42 | 26<br>1 | 21 | 49 |
| 32 | 23 | 34<br>41 | 27<br>56 | 22 | 33 |
| 33 | 24 | 16<br>41 | 13<br>33 | 23 | 20 |
| 34 | 24 | 57<br>41 | 46<br>16 | 24 | 51 |
| 35 | 25 | 39<br>41 | 2<br>1 | 24 | 51 |
| 36 | 26 | 20<br>40 | 3<br>44 | 25 | 37 |
| 37 | 27 | 0<br>40 | 47<br>27 | 26 | 33 |
| 38 | 27 | 41<br>40 | 14<br>9 | 27 | 9 |
| 39 | 28 | 21<br>39 | 23<br>50 | 27 | 55 |
| 40 | 29 | 1<br>39 | 13<br>30 | 28 | 43 |
| 41 | 29 | 40<br>39 | 43<br>10 | 29 | 30 |
| 42 | 30 | 19<br>38 | 53<br>48 | 30 | 17 |
| 43 | 30 | 58<br>38 | 47<br>26 | 31 | 5 |
| 44 | 31 | 37<br>38 | 7<br>4 | 31 | 53 |
| 45 | 32 | 15<br>37 | 11<br>39 | 32 | 42 |
| 46 | 32 | 52<br>37 | 50<br>16 | 33 | 30 |
| 47 | 33 | 30<br>36 | 6<br>49 | 34 | 17 |
| 48 | 34 | 6<br>36 | 55<br>22 | 35 | 6 |
| 49 | 34 | 43<br>35 | 17<br>54 | 35 | 54 |
| 50 | 35 | 19<br>35 | 32<br>25 | 36 | 42 |
| 51 | 35 | 54<br>34 | 37<br>57 | 37 | 33 |
| 52 | 36 | 29<br>34 | 34<br>25 | 38 | 21 |
| 53 | 37 | 3<br>33 | 59<br>52 | 39 | 10 |
| 54 | 37 | 37<br>33 | 51<br>20 | 39 | 59 |
| 55 | 38 | 11<br>32 | 11<br>45 | 40 | 47 |
| 56 | 38 | 43<br>32 | 56<br>10 | 41 | 38 |
| 57 | 39 | 16<br>31 | 6<br>33 | 42 | 26 |
| 58 | 39 | 47<br>30 | 39<br>52 | 43 | 14 |
| 59 | 40 | 18<br>30 | 33<br>14 | 44 | 2 |
| 60 | 40 | 48<br>29 | 48<br>35 | 44 | 50 |
| 61 | 41 | 18<br>28 | 33<br>52 | 45 | 38 |
| 62 | 41 | 41<br>28 | 15<br>8 | 46 | 26 |
| 63 | 42 | 15<br>27 | 33<br>25 | 47 | 13 |
| 64 | 42 | 43<br>26 | 48<br>37 | 47 | 58 |
| 65 | 43 | 9<br>25 | 25<br>50 | 48 | 44 |
| 66 | 43 | 35<br>25 | 15<br>1 | 49 | 29 |
| 67 | 44 | 0<br>24 | 16<br>10 | 50 | 13 |
| 68 | 44 | 24<br>23 | 26<br>18 | 50 | 56 |
| 69 | 44 | 41<br>22 | 44<br>16 | 51 | 40 |
| 70 | 45 | 10<br>21 | 10<br>31 | 52 | 21 |
| 71 | 45 | 31<br>20 | 41<br>34 | 53 | 0 |
| 72 | 45 | 52<br>19 | 15<br>37 | 53 | 39 |
| 73 | 46 | 11<br>18 | 52<br>38 | 54 | 17 |
| 74 | 46 | 30<br>17 | 30<br>37 | 54 | 53 |
| 75 | 46 | 48<br>16 | 7<br>26 | 55 | 28 |
| 76 | 47 | 4<br>15 | 43<br>34 | 56 | 1 |
| 77 | 47 | 20<br>14 | 17<br>30 | 56 | 33 |
| 78 | 47 | 34<br>13 | 47<br>25 | 57 | 2 |
| 79 | 47 | 48<br>12 | 12<br>19 | 57 | 29 |
| 80 | 48 | 0<br>11 | 31<br>12 | 57 | 54 |
| 81 | 48 | 11<br>10 | 43<br>3 | 58 | 17 |
| 82 | 48 | 21<br>8 | 46<br>54 | 58 | 38 |
| 83 | 48 | 30<br>7 | 47<br>42 | 58 | 56 |
| 84 | 48 | 38<br>6 | 25<br>39 | 59 | 13 |
| 85 | 48 | 44<br>5 | 0<br>13 | 59 | 27 |
| 86 | 48 | 50<br>4 | 33<br>12 | 59 | 39 |
| 87 | 48 | 54<br>3 | 39<br>0 | 59 | 48 |
| 88 | 48 | 57<br>1 | 39<br>42 | 59 | 54 |
| 89 | 48 | 59<br>0 | 32<br>36 | 59 | 58 |
| 90 | 49 | 0<br>0 | 0<br>0 | 60 | 0 |

12

| | Arcus dua | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 1 | 0 | 45 / 45 | 58 / 57 | 0 | 40 |
| 2 | 1 | 31 / 45 | 35 / 57 | 1 | 20 |
| 3 | 2 | 17 / 45 | 52 / 55 | 2 | 0 |
| 4 | 3 | 3 / 45 | 47 / 55 | 2 | 40 |
| 5 | 3 | 49 / 45 | 42 / 52 | 3 | 20 |
| 6 | 4 | 35 / 45 | 34 / 50 | 4 | 0 |
| 7 | 5 | 21 / 45 | 24 / 48 | 4 | 41 |
| 8 | 6 | 7 / 45 | 12 / 45 | 5 | 21 |
| 9 | 6 | 52 / 45 | 57 / 42 | 6 | 1 |
| 10 | 7 | 38 / 45 | 39 / 39 | 6 | 41 |
| 11 | 8 | 24 / 45 | 18 / 34 | 7 | 21 |
| 12 | 9 | 9 / 45 | 52 / 30 | 8 | 2 |
| 13 | 9 | 55 / 45 | 22 / 25 | 8 | 43 |
| 14 | 10 | 40 / 45 | 47 / 21 | 9 | 25 |
| 15 | 11 | 26 / 45 | 8 / 16 | 10 | 5 |
| 16 | 12 | 11 / 45 | 24 / 9 | 10 | 45 |
| 17 | 12 | 56 / 45 | 33 / 2 | 11 | 27 |
| 18 | 13 | 41 / 44 | 35 / 56 | 12 | 9 |
| 19 | 14 | 26 / 44 | 31 / 49 | 12 | 50 |
| 20 | 15 | 11 / 44 | 20 / 42 | 13 | 32 |
| 21 | 15 | 56 / 44 | 2 / 33 | 14 | 13 |
| 22 | 16 | 40 / 44 | 35 / 29 | 14 | 56 |
| 23 | 17 | 24 / 44 | 49 / 17 | 15 | 38 |
| 24 | 18 | 4 / 44 | 16 / 6 | 16 | 20 |
| 25 | 18 | 43 / 43 | 22 / 48 | 17 | 4 |
| 26 | 19 | 37 / 43 | 20 / 44 | 17 | 46 |
| 27 | 20 | 21 / 43 | 5 / 35 | 18 | 30 |
| 28 | 21 | 4 / 43 | 40 / 24 | 19 | 14 |
| 29 | 21 | 48 / 43 | 4 / 12 | 19 | 57 |
| 30 | 22 | 31 / 42 | 16 / 49 | 20 | 40 |

| | Arcus dua | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 31 | 23 | 14 / 42 | 15 / 45 | 21 | 25 |
| 32 | 23 | 57 / 42 | 0 / 33 | 22 | 10 |
| 33 | 24 | 35 / 42 | 33 / 18 | 22 | 54 |
| 34 | 25 | 21 / 42 | 51 / 2 | 23 | 39 |
| 35 | 26 | 3 / 41 | 53 / 47 | 24 | 24 |
| 36 | 26 | 44 / 41 | 40 / 30 | 25 | 10 |
| 37 | 27 | 27 / 41 | 10 / 13 | 25 | 56 |
| 38 | 28 | 8 / 40 | 33 / 44 | 26 | 42 |
| 39 | 28 | 49 / 40 | 18 / 38 | 27 | 30 |
| 40 | 29 | 29 / 40 | 16 / 17 | 28 | 15 |
| 41 | 30 | 10 / 39 | 13 / 57 | 29 | 2 |
| 42 | 30 | 50 / 39 | 10 / 56 | 29 | 49 |
| 43 | 31 | 29 / 39 | 46 / 14 | 30 | 36 |
| 44 | 32 | 9 / 38 | 0 / 53 | 31 | 24 |
| 45 | 32 | 47 / 38 | 53 / 21 | 32 | 11 |
| 46 | 33 | 26 / 38 | 20 / 4 | 33 | 0 |
| 47 | 34 | 4 / 37 | 24 / 37 | 33 | 49 |
| 48 | 34 | 42 / 37 | 1 / 11 | 34 | 36 |
| 49 | 35 | 39 / 36 | 12 / 42 | 35 | 24 |
| 50 | 35 | 55 / 36 | 54 / 16 | 36 | 16 |
| 51 | 36 | 32 / 35 | 10 / 45 | 37 | 4 |
| 52 | 37 | 7 / 35 | 54 / 14 | 37 | 52 |
| 53 | 37 | 43 / 34 | 9 / 41 | 38 | 41 |
| 54 | 38 | 17 / 34 | 50 / 8 | 39 | 32 |
| 55 | 38 | 51 / 33 | 48 / 36 | 40 | 22 |
| 56 | 39 | 25 / 32 | 34 / 48 | 41 | 8 |
| 57 | 39 | 58 / 32 | 32 / 21 | 41 | 59 |
| 58 | 40 | 30 / 31 | 53 / 42 | 42 | 48 |
| 59 | 41 | 2 / 31 | 35 / 3 | 43 | 37 |
| 60 | 41 | 33 / 30 | 38 / 23 | 44 | 26 |

| | Arcus dua | | | | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 61 | 42 | 4 / 29 | 1 / 40 | 45 | 14 |
| 62 | 42 | 33 / 28 | 41 / 55 | 46 | 2 |
| 63 | 43 | 2 / 28 | 36 / 10 | 46 | 49 |
| 64 | 43 | 30 / 27 | 40 / 23 | 47 | 37 |
| 65 | 43 | 58 / 26 | 9 / 35 | 48 | 23 |
| 66 | 44 | 24 / 25 | 44 / 45 | 49 | 9 |
| 67 | 44 | 50 / 24 | 59 / 53 | 49 | 54 |
| 68 | 45 | 15 / 24 | 22 / 2 | 50 | 40 |
| 69 | 45 | 39 / 23 | 24 / 7 | 51 | 22 |
| 70 | 46 | 2 / 22 | 31 / 10 | 52 | 4 |
| 71 | 46 | 24 / 21 | 41 / 13 | 52 | 46 |
| 72 | 46 | 45 / 20 | 54 / 15 | 53 | 26 |
| 73 | 47 | 6 / 19 | 9 / 14 | 54 | 5 |
| 74 | 47 | 25 / 18 | 23 / 12 | 54 | 42 |
| 75 | 47 | 42 / 17 | 35 / 9 | 55 | 19 |
| 76 | 48 | 0 / 16 | 44 / 6 | 55 | 52 |
| 77 | 48 | 16 / 14 | 50 / 45 | 56 | 24 |
| 78 | 48 | 31 / 13 | 49 / 52 | 56 | 54 |
| 79 | 48 | 45 / 12 | 41 / 44 | 57 | 23 |
| 80 | 48 | 58 / 11 | 25 / 35 | 57 | 49 |
| 81 | 49 | 10 / 10 | 0 / 24 | 58 | 13 |
| 82 | 49 | 20 / 9 | 24 / 13 | 58 | 34 |
| 83 | 49 | 29 / 8 | 37 / 1 | 58 | 54 |
| 84 | 49 | 37 / 6 | 38 / 49 | 59 | 13 |
| 85 | 49 | 44 / 5 | 27 / 35 | 59 | 28 |
| 86 | 49 | 50 / 4 | 2 / 21 | 59 | 40 |
| 87 | 49 | 54 / 3 | 23 / 7 | 59 | 49 |
| 88 | 49 | 57 / 1 | 30 / 52 | 59 | 55 |
| 89 | 49 | 59 / 0 | 22 / 38 | 60 | 0 |
| 90 | 50 | 0 / 0 | 0 / 0 | 60 | 0 |

51

| | Arcꝰ Dia | | | | |
|---|---|---|---|---|---|
| | G | M | 2ᵃ | M | 2ᵃ |
| 1 | 0 | 46 / 46 | 36 / 37 | 0 | 39 |
| 2 | 1 | 33 / 46 | 15 / 37 | 1 | 18 |
| 3 | 2 | 19 / 46 | 52 / 35 | 1 | 57 |
| 4 | 3 | 6 / 46 | 21 / 35 | 2 | 37 |
| 5 | 3 | 53 / 46 | 2 / 32 | 3 | 15 |
| 6 | 4 | 39 / 46 | 34 / 31 | 3 | 55 |
| 7 | 5 | 26 / 46 | 5 / 28 | 4 | 34 |
| 8 | 6 | 12 / 46 | 33 / 25 | 5 | 14 |
| 9 | 6 | 48 / 46 | 48 / 22 | 5 | 53 |
| 10 | 7 | 45 / 46 | 20 / 19 | 6 | 33 |
| 11 | 8 | 31 / 46 | 39 / 15 | 7 | 13 |
| 12 | 9 | 17 / 46 | 54 / 11 | 7 | 52 |
| 13 | 10 | 4 / 46 | 5 / 7 | 8 | 32 |
| 14 | 10 | 50 / 46 | 12 / 1 | 9 | 12 |
| 15 | 11 | 37 / 45 | 13 / 56 | 9 | 52 |
| 16 | 12 | 22 / 45 | 9 / 51 | 10 | 33 |
| 17 | 13 | 8 / 45 | 0 / 44 | 11 | 13 |
| 18 | 13 | 53 / 45 | 44 / 37 | 11 | 54 |
| 19 | 14 | 39 / 45 | 21 / 31 | 12 | 35 |
| 20 | 15 | 24 / 45 | 52 / 23 | 13 | 16 |
| 21 | 16 | 10 / 45 | 15 / 16 | 13 | 57 |
| 22 | 16 | 55 / 45 | 31 / 6 | 14 | 38 |
| 23 | 17 | 40 / 44 | 37 / 49 | 15 | 21 |
| 24 | 18 | 25 / 44 | 36 / 50 | 16 | 2 |
| 25 | 19 | 10 / 44 | 26 / 40 | 16 | 44 |
| 26 | 19 | 55 / 44 | 6 / 29 | 17 | 26 |
| 27 | 20 | 39 / 44 | 35 / 19 | 18 | 9 |
| 28 | 21 | 23 / 44 | 54 / 7 | 18 | 51 |
| 29 | 22 | 8 / 43 | 1 / 55 | 19 | 34 |
| 30 | 22 | 51 / 43 | 56 / 44 | 20 | 18 |

| | Arcus Dia | | | | |
|---|---|---|---|---|---|
| | G | M | 2ᵃ | M | 2ᵃ |
| 31 | 23 | 35 / 43 | 40 / 30 | 21 | 1 |
| 32 | 24 | 19 / 43 | 10 / 17 | 21 | 46 |
| 33 | 25 | 2 / 43 | 27 / 3 | 22 | 30 |
| 34 | 25 | 45 / 42 | 30 / 47 | 23 | 14 |
| 35 | 26 | 28 / 42 | 17 / 33 | 23 | 59 |
| 36 | 27 | 10 / 42 | 50 / 16 | 24 | 43 |
| 37 | 27 | 53 / 41 | 6 / 59 | 25 | 28 |
| 38 | 28 | 35 / 41 | 5 / 43 | 26 | 15 |
| 39 | 29 | 16 / 41 | 48 / 23 | 27 | 0 |
| 40 | 29 | 58 / 41 | 11 / 4 | 27 | 46 |
| 41 | 30 | 39 / 40 | 14 / 44 | 28 | 33 |
| 42 | 31 | 19 / 40 | 49 / 23 | 29 | 20 |
| 43 | 32 | 0 / 40 | 22 / 2 | 30 | 7 |
| 44 | 32 | 40 / 39 | 24 / 40 | 30 | 56 |
| 45 | 33 | 20 / 39 | 4 / 16 | 31 | 43 |
| 46 | 33 | 59 / 38 | 20 / 52 | 32 | 30 |
| 47 | 34 | 38 / 38 | 12 / 25 | 33 | 18 |
| 48 | 35 | 16 / 38 | 37 / 0 | 34 | 7 |
| 49 | 35 | 54 / 37 | 37 / 33 | 34 | 57 |
| 50 | 36 | 32 / 37 | 10 / 4 | 35 | 45 |
| 51 | 37 | 9 / 36 | 14 / 33 | 36 | 33 |
| 52 | 37 | 45 / 36 | 47 / 3 | 37 | 24 |
| 53 | 38 | 21 / 35 | 50 / 32 | 38 | 13 |
| 54 | 38 | 57 / 34 | 22 / 58 | 39 | 3 |
| 55 | 39 | 32 / 34 | 20 / 22 | 39 | 52 |
| 56 | 40 | 6 / 33 | 42 / 49 | 40 | 43 |
| 57 | 40 | 40 / 33 | 31 / 10 | 41 | 31 |
| 58 | 41 | 13 / 32 | 41 / 31 | 42 | 20 |
| 59 | 41 | 46 / 31 | 12 / 52 | 43 | 11 |
| 60 | 42 | 18 / 31 | 4 / 11 | 44 | 0 |

| | Arcus Dia | | | | |
|---|---|---|---|---|---|
| | G | M | 2ᵃ | M | 2ᵃ |
| 61 | 42 | 49 / 30 | 15 / 28 | 44 | 48 |
| 62 | 43 | 19 / 29 | 43 / 42 | 45 | 37 |
| 63 | 43 | 49 / 28 | 25 / 58 | 46 | 26 |
| 64 | 44 | 18 / 28 | 23 / 9 | 47 | 13 |
| 65 | 44 | 46 / 27 | 32 / 21 | 48 | 2 |
| 66 | 45 | 13 / 26 | 53 / 30 | 48 | 49 |
| 67 | 45 | 40 / 25 | 23 / 39 | 49 | 35 |
| 68 | 46 | 6 / 24 | 2 / 44 | 50 | 19 |
| 69 | 46 | 30 / 23 | 46 / 45 | 51 | 4 |
| 70 | 46 | 54 / 22 | 35 / 52 | 51 | 47 |
| 71 | 47 | 17 / 21 | 27 / 53 | 52 | 30 |
| 72 | 47 | 39 / 20 | 20 / 54 | 53 | 12 |
| 73 | 48 | 0 / 19 | 14 / 51 | 53 | 51 |
| 74 | 48 | 20 / 18 | 5 / 49 | 54 | 30 |
| 75 | 48 | 38 / 17 | 54 / 42 | 55 | 5 |
| 76 | 48 | 56 / 16 | 36 / 38 | 55 | 42 |
| 77 | 49 | 13 / 15 | 14 / 29 | 56 | 14 |
| 78 | 49 | 28 / 14 | 43 / 21 | 56 | 46 |
| 79 | 49 | 43 / 13 | 4 / 10 | 57 | 16 |
| 80 | 49 | 56 / 11 | 14 / 59 | 57 | 45 |
| 81 | 50 | 8 / 10 | 13 / 49 | 58 | 9 |
| 82 | 50 | 18 / 9 | 48 / 33 | 58 | 33 |
| 83 | 50 | 28 / 8 | 31 / 21 | 58 | 53 |
| 84 | 50 | 36 / 7 | 55 / 4 | 59 | 9 |
| 85 | 50 | 43 / 5 | 44 / 47 | 59 | 23 |
| 86 | 50 | 49 / 4 | 43 / 30 | 59 | 36 |
| 87 | 50 | 54 / 3 | 12 / 13 | 59 | 47 |
| 88 | 50 | 57 / 1 | 25 / 57 | 59 | 54 |
| 89 | 50 | 59 / 0 | 22 / 58 | 59 | 58 |
| 90 | 51 | 0 / 0 | 0 / 0 | 60 | 0 |

| Arg. | Ϭ | M (upper/lower) | Σ (upper/lower) | M | Σ |
|---|---|---|---|---|---|
| 1 | 0 | 47 / 47 | 17 / 16 | 0 | 38 |
| 2 | 1 | 34 / 47 | 33 / 16 | 1 | 17 |
| 3 | 2 | 21 / 47 | 49 / 19 | 1 | 59 |
| 4 | 3 | 9 / 47 | 4 / 13 | 2 | 33 |
| 5 | 3 | 56 / 47 | 17 / 12 | 3 | 12 |
| 6 | 4 | 23 / 47 | 29 / 10 | 3 | 50 |
| 7 | 5 | 30 / 47 | 39 / 8 | 4 | 28 |
| 8 | 6 | 17 / 47 | 47 / 4 | 5 | 6 |
| 9 | 7 | 4 / 47 | 51 / 2 | 5 | 46 |
| 10 | 7 | 51 / 46 | 53 / 59 | 6 | 24 |
| 11 | 8 | 38 / 46 | 52 / 54 | 7 | 2 |
| 12 | 9 | 35 / 46 | 46 / 51 | 7 | 42 |
| 13 | 10 | 12 / 46 | 37 / 47 | 8 | 21 |
| 14 | 10 | 59 / 46 | 34 / 41 | 9 | 0 |
| 15 | 11 | 46 / 46 | 5 / 37 | 9 | 41 |
| 16 | 12 | 33 / 46 | 42 / 31 | 10 | 19 |
| 17 | 13 | 19 / 46 | 13 / 25 | 10 | 58 |
| 18 | 14 | 5 / 46 | 38 / 18 | 11 | 38 |
| 19 | 14 | 51 / 46 | 56 / 12 | 12 | 18 |
| 20 | 15 | 38 / 46 | 8 / 4 | 12 | 58 |
| 21 | 16 | 24 / 45 | 12 / 57 | 13 | 39 |
| 22 | 17 | 10 / 45 | 9 / 49 | 14 | 20 |
| 23 | 17 | 55 / 45 | 58 / 40 | 15 | 2 |
| 24 | 18 | 41 / 45 | 38 / 32 | 15 | 42 |
| 25 | 19 | 27 / 45 | 10 / 22 | 16 | 23 |
| 26 | 20 | 12 / 45 | 32 / 12 | 17 | 4 |
| 27 | 20 | 57 / 45 | 44 / 1 | 17 | 46 |
| 28 | 21 | 42 / 44 | 44 / 50 | 18 | 28 |
| 29 | 22 | 27 / 44 | 34 / 39 | 19 | 11 |
| 30 | 23 | 12 / 44 | 14 / 27 | 19 | 54 |
| 31 | 23 | 56 / 44 | 57 / 15 | 20 | 37 |
| 32 | 24 | 40 / 44 | 46 / 1 | 21 | 19 |
| 33 | 25 | 24 / 43 | 57 / 47 | 22 | 3 |
| 34 | 26 | 8 / 43 | 44 / 32 | 22 | 47 |
| 35 | 26 | 52 / 43 | 16 / 17 | 23 | 31 |
| 36 | 27 | 35 / 43 | 33 / 1 | 24 | 16 |
| 37 | 28 | 18 / 42 | 34 / 46 | 25 | 1 |
| 38 | 29 | 1 / 42 | 20 / 28 | 25 | 46 |
| 39 | 29 | 43 / 42 | 48 / 9 | 26 | 31 |
| 40 | 30 | 25 / 41 | 57 / 51 | 27 | 18 |
| 41 | 31 | 7 / 41 | 48 / 31 | 28 | 3 |
| 42 | 31 | 49 / 41 | 19 / 10 | 28 | 50 |
| 43 | 32 | 30 / 40 | 29 / 51 | 29 | 38 |
| 44 | 33 | 11 / 40 | 20 / 27 | 30 | 34 |
| 45 | 33 | 51 / 40 | 47 / 3 | 31 | 11 |
| 46 | 34 | 31 / 39 | 50 / 40 | 32 | 0 |
| 47 | 35 | 11 / 39 | 30 / 14 | 32 | 48 |
| 48 | 35 | 50 / 38 | 44 / 50 | 33 | 38 |
| 49 | 36 | 29 / 38 | 34 / 21 | 34 | 24 |
| 50 | 36 | 7 / 37 | 55 / 52 | 35 | 14 |
| 51 | 37 | 45 / 37 | 47 / 34 | 36 | 3 |
| 52 | 38 | 23 / 36 | 17 / 52 | 36 | 52 |
| 53 | 39 | 0 / 36 | 3 / 22 | 37 | 44 |
| 54 | 39 | 36 / 35 | 24 / 47 | 38 | 32 |
| 55 | 40 | 12 / 35 | 12 / 13 | 39 | 22 |
| 56 | 40 | 47 / 34 | 25 / 57 | 40 | 11 |
| 57 | 41 | 22 / 33 | 2 / 49 | 41 | 2 |
| 58 | 41 | 56 / 33 | 1 / 22 | 41 | 54 |
| 59 | 42 | 30 / 32 | 35 / 41 | 42 | 42 |
| 60 | 43 | 2 / 31 | 4 / 49 | 43 | 32 |
| 61 | 43 | 34 / 31 | 3 / 17 | 44 | 22 |
| 62 | 44 | 5 / 30 | 20 / 31 | 45 | 11 |
| 63 | 44 | 35 / 29 | 51 / 45 | 46 | 2 |
| 64 | 45 | 5 / 28 | 36 / 48 | 46 | 50 |
| 65 | 45 | 34 / 28 | 34 / 8 | 47 | 38 |
| 66 | 46 | 2 / 27 | 42 / 16 | 48 | 25 |
| 67 | 46 | 29 / 26 | 58 / 33 | 49 | 13 |
| 68 | 46 | 56 / 25 | 21 / 29 | 49 | 59 |
| 69 | 47 | 21 / 24 | 50 / 32 | 50 | 46 |
| 70 | 47 | 46 / 23 | 22 / 35 | 51 | 31 |
| 71 | 48 | 9 / 22 | 57 / 34 | 52 | 14 |
| 72 | 48 | 33 / 21 | 32 / 33 | 52 | 55 |
| 73 | 48 | 54 / 20 | 5 / 30 | 53 | 36 |
| 74 | 49 | 14 / 19 | 35 / 24 | 54 | 15 |
| 75 | 49 | 33 / 18 | 59 / 19 | 54 | 54 |
| 76 | 49 | 52 / 17 | 18 / 10 | 55 | 31 |
| 77 | 50 | 9 / 16 | 28 / 1 | 56 | 7 |
| 78 | 50 | 24 / 14 | 29 / 51 | 56 | 40 |
| 79 | 50 | 40 / 13 | 20 / 39 | 57 | 9 |
| 80 | 50 | 53 / 12 | 59 / 23 | 57 | 36 |
| 81 | 51 | 6 / 11 | [illegible] / 9 | 58 | 3 |
| 82 | 51 | 17 / 9 | 31 / 53 | 58 | 27 |
| 83 | 51 | 27 / 8 | 24 / 36 | 58 | 49 |
| 84 | 51 | 36 / 7 | 0 / 18 | 59 | 7 |
| 85 | 51 | 43 / 6 | 18 / 0 | 59 | 23 |
| 86 | 51 | 49 / 4 | 18 / 41 | 59 | 35 |
| 87 | 51 | 53 / 3 | 59 / 20 | 59 | 44 |
| 88 | 51 | 57 / 2 | 19 / 1 | 59 | 54 |
| 89 | 51 | 59 / 0 | 20 / 40 | 59 | 58 |
| 90 | 52 | 0 / 0 | 0 / 0 | 60 | 0 |

52

| | G | M | 2 | M | 2 | | G | M | 2 | M | 2 | | G | M | 2 | M | 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Arcus | Diei | | | | | Arcus | Diei | | | | | Arcus | Diei | | | |
| 1 | 0 | 47 / 47 | 55 / 55 | 0 | 37 | 31 | 24 | 17 / 44 | 16 / 57 | 20 | 12 | 61 | 44 | 18 / 32 | 24 / 6 | 43 | 53 |
| 2 | 1 | 35 / 47 | 50 / 54 | 1 | 15 | 32 | 25 | 2 / 44 | 15 / 45 | 20 | 55 | 62 | 44 | 50 / 31 | 31 / 22 | 44 | 44 |
| 3 | 2 | 33 / 47 | 44 / 53 | 1 | 52 | 33 | 25 | 47 / 44 | 4 / 31 | 21 | 37 | 63 | 45 | 21 / 30 | 53 / 35 | 45 | 35 |
| 4 | 3 | 11 / 47 | 37 / 52 | 2 | 30 | 34 | 26 | 31 / 44 | 31 / 16 | 22 | 20 | 64 | 45 | 52 / 29 | 26 / 46 | 46 | 23 |
| 5 | 3 | 59 / 47 | 29 / 50 | 3 | 7 | 35 | 27 | 15 / 44 | 47 / 2 | 23 | 4 | 65 | 46 | 22 / 28 | 12 / 55 | 47 | 12 |
| 6 | 4 | 47 / 47 | 19 / 48 | 3 | 45 | 36 | 27 | 59 / 43 | 49 / 46 | 23 | 48 | 66 | 46 | 51 / 28 | 7 / 4 | 48 | 2 |
| 7 | 5 | 35 / 47 | 7 / 46 | 4 | 22 | 37 | 28 | 43 / 43 | 35 / 31 | 24 | 33 | 67 | 47 | 19 / 27 | 11 / 9 | 48 | 50 |
| 8 | 6 | 22 / 47 | 53 / 44 | 5 | 0 | 38 | 29 | 27 / 43 | 6 / 13 | 25 | 17 | 68 | 47 | 46 / 26 | 20 / 16 | 49 | 40 |
| 9 | 7 | 10 / 47 | 37 / 40 | 5 | 38 | 39 | 30 | 10 / 42 | 19 / 56 | 26 | 2 | 69 | 48 | 12 / 25 | 36 / 17 | 50 | 24 |
| 10 | 7 | 48 / 47 | 17 / 37 | 6 | 16 | 40 | 30 | 53 / 42 | 15 / 36 | 26 | 47 | 70 | 48 | 37 / 24 | 53 / 18 | 51 | 10 |
| 11 | 8 | 45 / 47 | 54 / 34 | 6 | 54 | 41 | 31 | 35 / 42 | 51 / 18 | 27 | 32 | 71 | 49 | 2 / 23 | 11 / 16 | 51 | 46 |
| 12 | 9 | 33 / 47 | 28 / 30 | 7 | 32 | 42 | 32 | 18 / 41 | 9 / 58 | 28 | 20 | 72 | 49 | 25 / 22 | 27 / 14 | 52 | 40 |
| 13 | 10 | 20 / 47 | 58 / 26 | 8 | 10 | 43 | 33 | 0 / 41 | 7 / 37 | 29 | 6 | 73 | 49 | 47 / 21 | 47 / 9 | 53 | 22 |
| 14 | 11 | 8 / 47 | 24 / 22 | 8 | 48 | 44 | 33 | 41 / 41 | 47 / 14 | 29 | 53 | 74 | 50 | 8 / 20 | 50 / 3 | 54 | 5 |
| 15 | 11 | 55 / 47 | 46 / 15 | 9 | 26 | 45 | 34 | 22 / 40 | 58 / 52 | 30 | 41 | 75 | 50 | 28 / 18 | 53 / 46 | 54 | 44 |
| 16 | 12 | 43 / 47 | 1 / 10 | 10 | 5 | 46 | 35 | 3 / 40 | 50 / 28 | 31 | 28 | 76 | 50 | 47 / 17 | 44 / 46 | 55 | 21 |
| 17 | 13 | 30 / 47 | 11 / 5 | 10 | 45 | 47 | 35 | 44 / 40 | 18 / 4 | 32 | 17 | 77 | 51 | 5 / 16 | 35 / 34 | 55 | 56 |
| 18 | 14 | 17 / 46 | 16 / 58 | 11 | 33 | 48 | 36 | 24 / 39 | 22 / 37 | 33 | 4 | 78 | 51 | 23 / 15 | 9 / 20 | 56 | 29 |
| 19 | 15 | 4 / 46 | 14 / 52 | 12 | 3 | 49 | 37 | 3 / 39 | 59 / 10 | 33 | 52 | 79 | 51 | 37 / 14 | 29 / 6 | 57 | 2 |
| 20 | 15 | 51 / 46 | 6 / 45 | 12 | 43 | 50 | 37 | 43 / 38 | 9 / 41 | 34 | 41 | 80 | 51 | 51 / 12 | 39 / 50 | 57 | 32 |
| 21 | 16 | 37 / 46 | 51 / 38 | 13 | 22 | 51 | 38 | 21 / 38 | 50 / 13 | 35 | 32 | 81 | 52 | 4 / 11 | 25 / 33 | 58 | 0 |
| 22 | 17 | 24 / 46 | 29 / 31 | 14 | 1 | 52 | 39 | 0 / 37 | 3 / 44 | 36 | 22 | 82 | 52 | 15 / 10 | 58 / 15 | 58 | 25 |
| 23 | 18 | 11 / 46 | 0 / 20 | 14 | 40 | 53 | 39 | 37 / 37 | 41 / 10 | 37 | 11 | 83 | 52 | 26 / 8 | 13 / 54 | 58 | 47 |
| 24 | 18 | 57 / 46 | 20 / 13 | 15 | 22 | 54 | 40 | 14 / 36 | 57 / 37 | 38 | 0 | 84 | 52 | 35 / 7 | 7 / 34 | 59 | 6 |
| 25 | 19 | 43 / 46 | 33 / 3 | 16 | 2 | 55 | 40 | 51 / 36 | 34 / 2 | 38 | 50 | 85 | 52 | 42 / 6 | 47 / 12 | 59 | 23 |
| 26 | 20 | 29 / 45 | 36 / 54 | 16 | 43 | 56 | 41 | 27 / 35 | 36 / 28 | 39 | 41 | 86 | 52 | 48 / 4 | 53 / 51 | 59 | 37 |
| 27 | 21 | 15 / 45 | 30 / 43 | 17 | 24 | 57 | 42 | 3 / 34 | 4 / 51 | 40 | 32 | 87 | 52 | 53 / 3 | 44 / 29 | 59 | 48 |
| 28 | 22 | 1 / 45 | 13 / 33 | 18 | 6 | 58 | 42 | 37 / 34 | 55 / 10 | 41 | 21 | 88 | 52 | 57 / 2 | 13 / 5 | 59 | 54 |
| 29 | 22 | 46 / 45 | 46 / 22 | 18 | 47 | 59 | 43 | 12 / 33 | 5 / 31 | 42 | 12 | 89 | 52 | 59 / 0 | 18 / 42 | 59 | 59 |
| 30 | 23 | 32 / 45 | 8 / 10 | 19 | 29 | 60 | 43 | 45 / 32 | 36 / 49 | 43 | 3 | 90 | 53 | 0 / 0 | 0 / 0 | 60 | 0 |

| | Arcus | Dia | | | | | Arcus | Dia | | | | | Arcus | Dia | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G | M | S | M | S | | G | M | S | M | S | | G | M | S | M | S |
| 1 | 0 | 48 / 48 | 32 / 33 | 0 | 37 | 31 | 24 | 37 / 45 | 30 / 40 | 19 | 46 | 61 | 45 | 12 / 32 | 8 / 57 | 43 | 25 |
| 2 | 1 | 37 / 48 | 5 / 31 | 1 | 12 | 32 | 25 | 23 / 45 | 10 / 27 | 20 | 28 | 62 | 45 | 35 / 32 | 14 / 11 | 44 | 14 |
| 3 | 2 | 25 / 48 | 36 / 31 | 1 | 50 | 33 | 26 | 8 / 45 | 37 / 14 | 21 | 10 | 63 | 46 | 7 / 31 | 26 / 23 | 45 | 6 |
| 4 | 3 | 14 / 48 | 7 / 29 | 2 | 26 | 34 | 26 | 53 / 45 | 51 / 0 | 21 | 53 | 64 | 46 | 38 / 30 | 49 / 35 | 45 | 57 |
| 5 | 4 | 2 / 48 | 36 / 28 | 3 | 2 | 35 | 27 | 38 / 44 | 51 / 46 | 22 | 36 | 65 | 47 | 9 / 29 | 24 / 45 | 46 | 47 |
| 6 | 4 | 51 / 48 | 4 / 25 | 3 | 39 | 36 | 28 | 23 / 44 | 37 / 31 | 23 | 19 | 66 | 47 | 39 / 28 | 9 / 52 | 47 | 38 |
| 7 | 5 | 39 / 48 | 29 / 24 | 4 | 17 | 37 | 29 | 8 / 44 | 8 / 14 | 24 | 4 | 67 | 48 | 8 / 27 | 1 / 59 | 48 | 27 |
| 8 | 6 | 27 / 48 | 53 / 22 | 4 | 53 | 38 | 29 | 52 / 43 | 22 / 57 | 24 | 47 | 68 | 48 | 36 / 27 | 0 / 0 | 49 | 14 |
| 9 | 7 | 16 / 48 | 15 / 18 | 5 | 29 | 39 | 30 | 36 / 43 | 21 / 41 | 25 | 32 | 69 | 49 | 3 / 26 | 0 / 3 | 50 | 4 |
| 10 | 8 | 4 / 48 | 33 / 15 | 6 | 6 | 40 | 31 | 20 / 43 | 2 / 23 | 26 | 17 | 70 | 49 | 29 / 25 | 3 / 4 | 50 | 51 |
| 11 | 8 | 52 / 48 | 48 / 12 | 6 | 44 | 41 | 32 | 3 / 43 | 25 / 5 | 27 | 2 | 71 | 49 | 54 / 24 | 7 / 0 | 51 | 37 |
| 12 | 9 | 41 / 48 | 0 / 8 | 7 | 21 | 42 | 32 | 46 / 42 | 30 / 43 | 27 | 47 | 72 | 50 | 18 / 23 | 7 / 56 | 52 | 22 |
| 13 | 10 | 29 / 48 | 8 / 4 | 7 | 59 | 43 | 33 | 29 / 42 | 13 / 24 | 28 | 35 | 73 | 50 | 42 / 21 | 3 / 52 | 53 | 6 |
| 14 | 11 | 17 / 48 | 12 / 0 | 8 | 35 | 44 | 34 | 11 / 42 | 37 / 2 | 29 | 20 | 74 | 51 | 3 / 20 | 55 / 42 | 53 | 47 |
| 15 | 12 | 5 / 47 | 12 / 54 | 9 | 12 | 45 | 34 | 53 / 41 | 39 / 39 | 30 | 7 | 75 | 51 | 23 / 19 | 37 / 33 | 54 | 28 |
| 16 | 12 | 53 / 47 | 6 / 50 | 9 | 52 | 46 | 35 | 35 / 41 | 18 / 17 | 30 | 55 | 76 | 51 | 43 / 18 | 10 / 21 | 55 | 7 |
| 17 | 13 | 40 / 47 | 56 / 43 | 10 | 29 | 47 | 36 | 16 / 40 | 35 / 51 | 31 | 42 | 77 | 52 | 1 / 17 | 31 / 7 | 55 | 46 |
| 18 | 14 | 28 / 47 | 39 / 38 | 11 | 8 | 48 | 36 | 57 / 40 | 26 / 24 | 32 | 31 | 78 | 52 | 18 / 14 | 38 / 43 | 56 | 22 |
| 19 | 15 | 16 / 47 | 17 / 31 | 11 | 46 | 49 | 37 | 37 / 39 | 50 / 49 | 33 | 20 | 79 | 52 | 34 / 14 | 51 / 16 | 56 | 54 |
| 20 | 16 | 3 / 47 | 48 / 24 | 12 | 24 | 50 | 38 | 17 / 39 | 40 / 32 | 34 | 8 | 80 | 52 | 49 / 13 | 7 / 18 | 57 | 25 |
| 21 | 16 | 51 / 47 | 13 / 17 | 13 | 3 | 51 | 38 | 57 / 39 | 22 / 3 | 34 | 48 | 81 | 53 | 2 / 11 | 25 / 48 | 57 | 53 |
| 22 | 17 | 38 / 47 | 30 / 10 | 13 | 42 | 52 | 39 | 36 / 38 | 24 / 52 | 35 | 27 | 82 | 53 | 14 / 10 | 13 / 37 | 58 | 18 |
| 23 | 18 | 25 / 47 | 40 / 2 | 14 | 21 | 53 | 40 | 15 / 38 | 57 / 0 | 36 | 37 | 83 | 53 | 24 / 9 | 0 / 13 | 58 | 41 |
| 24 | 19 | 12 / 46 | 42 / 53 | 15 | 1 | 54 | 40 | 53 / 37 | 57 / 27 | 37 | 27 | 84 | 53 | 33 / 7 | 13 / 41 | 59 | 2 |
| 25 | 19 | 59 / 46 | 36 / 44 | 15 | 41 | 55 | 41 | 30 / 36 | 24 / 43 | 38 | 17 | 85 | 53 | 42 / 6 | 4 / 26 | 59 | 19 |
| 26 | 20 | 46 / 46 | 19 / 36 | 16 | 21 | 56 | 42 | 7 / 36 | 17 / 19 | 39 | 10 | 86 | 53 | 48 / 5 | 30 / 2 | 59 | 34 |
| 27 | 21 | 32 / 46 | 54 / 25 | 17 | 1 | 57 | 42 | 43 / 35 | 36 / 40 | 39 | 49 | 87 | 53 | 53 / 3 | 32 / 35 | 59 | 44 |
| 28 | 22 | 19 / 46 | 19 / 14 | 17 | 42 | 58 | 43 | 19 / 35 | 16 / 1 | 40 | 40 | 88 | 53 | 57 / 2 | 7 / 10 | 59 | 54 |
| 29 | 23 | 5 / 46 | 33 / 4 | 18 | 23 | 59 | 43 | 54 / 34 | 17 / 22 | 41 | 41 | 89 | 53 | 59 / 0 | 17 / 43 | 59 | 58 |
| 30 | 23 | 51 / 45 | 37 / 53 | 19 | 4 | 60 | 44 | 28 / 33 | 39 / 39 | 42 | 33 | 90 | 54 | 0 / 0 | 0 / 0 | 60 | 0 |

55

| | Arcus | diei | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 1 | 0 | 49<br>49 | 9<br>8 | 0 | 36 |
| 2 | 1 | 38<br>49 | 17<br>9 | 1 | 12 |
| 3 | 2 | 27<br>49 | 26<br>7 | 1 | 46 |
| 4 | 3 | 16<br>49 | 33<br>5 | 2 | 22 |
| 5 | 4 | 5<br>49 | 38<br>5 | 2 | 59 |
| 6 | 4 | 54<br>49 | 43<br>3 | 3 | 34 |
| 7 | 5 | 43<br>49 | 46<br>0 | 4 | 9 |
| 8 | 6 | 32<br>48 | 46<br>58 | 4 | 46 |
| 9 | 7 | 21<br>48 | 44<br>55 | 5 | 22 |
| 10 | 8 | 10<br>48 | 39<br>59 | 5 | 58 |
| 11 | 8 | 59<br>48 | 32<br>49 | 6 | 34 |
| 12 | 9 | 48<br>48 | 21<br>46 | 7 | 11 |
| 13 | 10 | 37<br>48 | 7<br>40 | 7 | 46 |
| 14 | 11 | 26<br>48 | 47<br>31 | 8 | 24 |
| 15 | 12 | 14<br>48 | 24<br>34 | 9 | 2 |
| 16 | 13 | 2<br>48 | 58<br>28 | 9 | 37 |
| 17 | 13 | 51<br>48 | 26<br>21 | 10 | 14 |
| 18 | 14 | 39<br>48 | 47<br>16 | 10 | 51 |
| 19 | 15 | 28<br>48 | 3<br>9 | 11 | 29 |
| 20 | 16 | 16<br>48 | 12<br>4 | 12 | 7 |
| 21 | 17 | 4<br>47 | 16<br>46 | 12 | 45 |
| 22 | 17 | 52<br>47 | 12<br>49 | 13 | 23 |
| 23 | 18 | 40<br>47 | 1<br>42 | 14 | 2 |
| 24 | 19 | 27<br>47 | 43<br>33 | 14 | 40 |
| 25 | 20 | 14<br>47 | 16<br>24 | 15 | 19 |
| 26 | 21 | 2<br>47 | 40<br>15 | 15 | 59 |
| 27 | 21 | 49<br>47 | 55<br>6 | 16 | 39 |
| 28 | 22 | 37<br>46 | 1<br>55 | 17 | 18 |
| 29 | 23 | 23<br>46 | 56<br>49 | 17 | 59 |
| 30 | 24 | 10<br>46 | 41<br>34 | 18 | 39 |

| | Arcus | diei | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 31 | 24 | 57<br>46 | 16<br>22 | 19 | 20 |
| 32 | 25 | 43<br>46 | 38<br>49 | 20 | 1 |
| 33 | 26 | 29<br>45 | 47<br>57 | 20 | 43 |
| 34 | 27 | 14<br>45 | 44<br>43 | 21 | 24 |
| 35 | 28 | 1<br>45 | 27<br>29 | 22 | 7 |
| 36 | 28 | 46<br>44 | 56<br>36 | 22 | 51 |
| 37 | 29 | 32<br>40 | 12<br>58 | 23 | 33 |
| 38 | 30 | 17<br>44 | 10<br>43 | 24 | 17 |
| 39 | 31 | 1<br>44 | 53<br>26 | 25 | 1 |
| 40 | 31 | 46<br>44 | 19<br>8 | 25 | 46 |
| 41 | 32 | 30<br>43 | 27<br>40 | 26 | 32 |
| 42 | 33 | 14<br>43 | 17<br>31 | 27 | 16 |
| 43 | 33 | 57<br>43 | 48<br>9 | 28 | 1 |
| 44 | 34 | 40<br>42 | 57<br>49 | 28 | 48 |
| 45 | 35 | 23<br>42 | 46<br>27 | 29 | 34 |
| 46 | 36 | 6<br>42 | 43<br>4 | 30 | 22 |
| 47 | 36 | 48<br>41 | 17<br>40 | 31 | 9 |
| 48 | 37 | 29<br>41 | 57<br>12 | 31 | 56 |
| 49 | 38 | 11<br>40 | 11<br>47 | 32 | 44 |
| 50 | 38 | 51<br>40 | 58<br>22 | 33 | 36 |
| 51 | 39 | 33<br>39 | 20<br>52 | 34 | 22 |
| 52 | 40 | 12<br>39 | 12<br>22 | 35 | 13 |
| 53 | 40 | 51<br>38 | 34<br>50 | 36 | 2 |
| 54 | 41 | 30<br>38 | 24<br>17 | 36 | 52 |
| 55 | 42 | 8<br>37 | 41<br>46 | 37 | 46 |
| 56 | 42 | 46<br>37 | 27<br>8 | 38 | 34 |
| 57 | 43 | 23<br>36 | 35<br>31 | 39 | 26 |
| 58 | 44 | 0<br>35 | 6<br>52 | 40 | 18 |
| 59 | 44 | 35<br>34 | 58<br>12 | 41 | 11 |
| 60 | 45 | 11<br>32 | 12<br>31 | 42 | 1 |

| | Arcus | diei | | | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 61 | 45 | 44<br>33 | 43<br>47 | 42 | 53 |
| 62 | 46 | 19<br>33 | 30<br>2 | 43 | 44 |
| 63 | 46 | 52<br>32 | 32<br>14 | 44 | 36 |
| 64 | 47 | 24<br>31 | 46<br>25 | 45 | 29 |
| 65 | 47 | 56<br>30 | 11<br>36 | 46 | 20 |
| 66 | 48 | 26<br>29 | 47<br>48 | 47 | 10 |
| 67 | 48 | 56<br>28 | 28<br>46 | 48 | 0 |
| 68 | 49 | 25<br>27 | 14<br>50 | 48 | 50 |
| 69 | 49 | 53<br>26 | 4<br>50 | 49 | 41 |
| 70 | 50 | 19<br>25 | 54<br>55 | 50 | 29 |
| 71 | 50 | 44<br>24 | 44<br>44 | 51 | 16 |
| 72 | 51 | 10<br>23 | 29<br>40 | 52 | 2 |
| 73 | 51 | 34<br>22 | 9<br>33 | 52 | 48 |
| 74 | 51 | 56<br>21 | 52<br>33 | 53 | 32 |
| 75 | 52 | 18<br>20 | 5<br>12 | 54 | 14 |
| 76 | 52 | 38<br>19 | 17<br>0 | 54 | 56 |
| 77 | 52 | 51<br>17 | 17<br>43 | 55 | 33 |
| 78 | 53 | 14<br>16 | 0<br>24 | 56 | 10 |
| 79 | 53 | 31<br>14 | 24<br>7 | 56 | 44 |
| 80 | 53 | 46<br>13 | 22<br>46 | 57 | 16 |
| 81 | 54 | 0<br>12 | 18<br>23 | 57 | 46 |
| 82 | 54 | 12<br>11 | 41<br>0 | 58 | 13 |
| 83 | 54 | 23<br>9 | 41<br>34 | 58 | 37 |
| 84 | 54 | 33<br>8 | 14<br>8 | 59 | 0 |
| 85 | 54 | 41<br>6 | 33<br>41 | 59 | 19 |
| 86 | 54 | 48<br>5 | 4<br>13 | 59 | 34 |
| 87 | 54 | 53<br>3 | 17<br>44 | 59 | 44 |
| 88 | 54 | 57<br>2 | 1<br>14 | 59 | 54 |
| 89 | 54 | 59<br>0 | 14<br>24 | 59 | 59 |
| 90 | 55 | 0<br>0 | 0<br>0 | 60 | 0 |

| Asc9 Recta | G | M | S | m | s |
|---|---|---|---|---|---|
| 1 | 0 | 49 / 49 | 45 / 44 | 0 | 34 |
| 2 | 1 | 39 / 49 | 29 / 43 | 1 | 9 |
| 3 | 2 | 29 / 49 | 12 / 43 | 1 | 44 |
| 4 | 3 | 18 / 49 | 44 / 42 | 2 | 19 |
| 5 | 4 | 8 / 49 | 37 / 40 | 2 | 53 |
| 6 | 4 | 48 / 49 | 17 / 38 | 3 | 28 |
| 7 | 5 | 47 / 49 | 55 / 37 | 4 | 4 |
| 8 | 6 | 37 / 49 | 32 / 34 | 4 | 38 |
| 9 | 7 | 27 / 49 | 6 / 31 | 5 | 13 |
| 10 | 8 | 16 / 49 | 37 / 29 | 5 | 49 |
| 11 | 9 | 6 / 49 | 6 / 25 | 6 | 24 |
| 12 | 9 | 55 / 49 | 31 / 22 | 7 | 0 |
| 13 | 10 | 44 / 49 | 53 / 18 | 7 | 35 |
| 14 | 11 | 34 / 49 | 11 / 14 | 8 | 12 |
| 15 | 12 | 23 / 49 | 26 / 9 | 8 | 46 |
| 16 | 13 | 12 / 49 | 35 / 4 | 9 | 23 |
| 17 | 14 | 1 / 48 | 39 / 55 | 9 | 59 |
| 18 | 14 | 50 / 48 | 38 / 54 | 10 | 36 |
| 19 | 15 | 39 / 48 | 33 / 47 | 11 | 12 |
| 20 | 16 | 28 / 48 | 19 / 42 | 11 | 49 |
| 21 | 17 | 17 / 48 | 1 / 34 | 12 | 26 |
| 22 | 18 | 5 / 48 | 35 / 28 | 13 | 5 |
| 23 | 18 | 54 / 48 | 3 / 20 | 13 | 42 |
| 24 | 19 | 42 / 48 | 23 / 12 | 14 | 20 |
| 25 | 20 | 30 / 48 | 35 / 4 | 14 | 58 |
| 26 | 21 | 18 / 47 | 39 / 55 | 15 | 36 |
| 27 | 22 | 6 / 47 | 30 / 44 | 16 | 14 |
| 28 | 22 | 54 / 47 | 19 / 36 | 16 | 54 |
| 29 | 23 | 51 / 47 | 55 / 25 | 17 | 33 |
| 30 | 24 | 39 / 47 | 20 / 16 | 18 | 14 |

| Ascens Recta | G | M | S | m | s |
|---|---|---|---|---|---|
| 31 | 25 | 16 / 47 | 36 / 3 | 18 | 53 |
| 32 | 26 | 3 / 46 | 39 / 51 | 19 | 33 |
| 33 | 26 | 50 / 46 | 30 / 39 | 20 | 14 |
| 34 | 27 | 37 / 46 | 9 / 25 | 20 | 56 |
| 35 | 28 | 23 / 46 | 34 / 13 | 21 | 38 |
| 36 | 29 | 9 / 45 | 47 / 48 | 22 | 20 |
| 37 | 29 | 55 / 45 | 45 / 42 | 23 | 2 |
| 38 | 30 | 41 / 45 | 27 / 21 | 23 | 46 |
| 39 | 31 | 26 / 45 | 54 / 11 | 24 | 29 |
| 40 | 32 | 12 / 44 | 5 / 59 | 25 | 12 |
| 41 | 32 | 56 / 44 | 59 / 34 | 25 | 56 |
| 42 | 33 | 41 / 44 | 33 / 16 | 26 | 42 |
| 43 | 34 | 27 / 43 | 49 / 46 | 27 | 27 |
| 44 | 35 | 9 / 43 | 45 / 35 | 28 | 13 |
| 45 | 35 | 53 / 43 | 20 / 15 | 29 | 1 |
| 46 | 36 | 36 / 42 | 35 / 41 | 29 | 46 |
| 47 | 37 | 19 / 42 | 26 / 27 | 30 | 33 |
| 48 | 38 | 1 / 42 | 43 / 3 | 31 | 22 |
| 49 | 38 | 43 / 41 | 46 / 38 | 32 | 10 |
| 50 | 39 | 24 / 41 | 34 / 8 | 32 | 58 |
| 51 | 40 | 6 / 40 | 42 / 43 | 33 | 49 |
| 52 | 40 | 47 / 40 | 25 / 11 | 34 | 37 |
| 53 | 41 | 27 / 39 | 36 / 41 | 35 | 28 |
| 54 | 42 | 7 / 39 | 17 / 10 | 36 | 19 |
| 55 | 42 | 46 / 38 | 27 / 34 | 37 | 8 |
| 56 | 43 | 25 / 38 | 1 / 0 | 38 | 0 |
| 57 | 44 | 3 / 37 | 1 / 23 | 38 | 51 |
| 58 | 44 | 40 / 36 | 24 / 44 | 39 | 43 |
| 59 | 45 | 17 / 36 | 9 / 4 | 40 | 35 |
| 60 | 45 | 53 / 35 | 13 / 23 | 41 | 28 |

| Ascens Recta | G | M | S | m | s |
|---|---|---|---|---|---|
| 61 | 46 | 28 / 34 | 36 / 38 | 42 | 19 |
| 62 | 47 | 3 / 33 | 14 / 44 | 43 | 13 |
| 63 | 47 | 37 / 33 | 8 / 7 | 44 | 6 |
| 64 | 48 | 10 / 32 | 15 / 16 | 44 | 58 |
| 65 | 48 | 42 / 31 | 31 / 26 | 45 | 50 |
| 66 | 49 | 13 / 30 | 57 / 31 | 46 | 41 |
| 67 | 49 | 44 / 29 | 28 / 36 | 47 | 34 |
| 68 | 50 | 14 / 28 | 4 / 41 | 48 | 26 |
| 69 | 50 | 42 / 27 | 44 / 38 | 49 | 14 |
| 70 | 51 | 10 / 26 | 23 / 37 | 50 | 4 |
| 71 | 51 | 37 / 25 | 0 / 31 | 50 | 53 |
| 72 | 52 | 2 / 24 | 31 / 25 | 51 | 42 |
| 73 | 52 | 26 / 23 | 56 / 18 | 52 | 29 |
| 74 | 52 | 50 / 22 | 14 / 6 | 53 | 15 |
| 75 | 53 | 12 / 20 | 24 / 53 | 53 | 58 |
| 76 | 53 | 33 / 19 | 13 / 37 | 54 | 40 |
| 77 | 53 | 43 / 18 | 40 / 20 | 55 | 21 |
| 78 | 54 | 11 / 17 | 10 / 0 | 55 | 59 |
| 79 | 54 | 28 / 15 | 10 / 38 | 56 | 36 |
| 80 | 54 | 43 / 14 | 48 / 16 | 57 | 10 |
| 81 | 54 | 48 / 12 | 4 / 40 | 57 | 42 |
| 82 | 55 | 10 / 11 | 44 / 29 | 58 | 10 |
| 83 | 55 | 22 / 9 | 18 / 57 | 58 | 35 |
| 84 | 55 | 32 / 8 | 15 / 27 | 58 | 56 |
| 85 | 55 | 40 / 6 | 42 / 46 | 59 | 15 |
| 86 | 55 | 47 / 5 | 38 / 33 | 59 | 30 |
| 87 | 55 | 53 / 3 | 1 / 44 | 59 | 44 |
| 88 | 55 | 56 / 2 | 55 / 19 | 59 | 51 |
| 89 | 55 | 59 / 0 | 14 / 46 | 59 | 57 |
| 90 | 56 | 0 / 0 | 0 / 0 | 60 | 0 |

# 57

| | Arcus | | | Decl. | |
|---|---|---|---|---|---|
| | G | M | 2 | M | 2 |
| 1 | 0 | 40<br>50 | 19<br>19 | 0 | 34 |
| 2 | 1 | 40<br>50 | 38<br>19 | 1 | 8 |
| 3 | 2 | 30<br>50 | 57<br>17 | 1 | 41 |
| 4 | 3 | 21<br>50 | 14<br>16 | 2 | 15 |
| 5 | 4 | 11<br>50 | 30<br>15 | 2 | 49 |
| 6 | 5 | 1<br>50 | 45<br>54 | 3 | 23 |
| 7 | 5 | 51<br>50 | 59<br>9 | 3 | 57 |
| 8 | 6 | 42<br>50 | 10<br>9 | 4 | 31 |
| 9 | 7 | 32<br>50 | 19<br>7 | 5 | 6 |
| 10 | 8 | 22<br>50 | 26<br>4 | 5 | 40 |
| 11 | 9 | 12<br>50 | 30<br>1 | 6 | 14 |
| 12 | 10 | 2<br>49 | 31<br>57 | 6 | 48 |
| 13 | 10 | 52<br>49 | 28<br>55 | 7 | 22 |
| 14 | 11 | 42<br>49 | 23<br>49 | 7 | 58 |
| 15 | 12 | 32<br>49 | 12<br>46 | 8 | 33 |
| 16 | 13 | 21<br>49 | 58<br>40 | 9 | 8 |
| 17 | 14 | 11<br>49 | 38<br>36 | 9 | 44 |
| 18 | 15 | 1<br>49 | 14<br>30 | 10 | 19 |
| 19 | 15 | 50<br>49 | 45<br>24 | 10 | 55 |
| 20 | 16 | 40<br>49 | 8<br>19 | 11 | 31 |
| 21 | 17 | 29<br>49 | 27<br>13 | 12 | 7 |
| 22 | 18 | 18<br>49 | 40<br>5 | 12 | 44 |
| 23 | 19 | 7<br>48 | 45<br>58 | 13 | 20 |
| 24 | 19 | 56<br>48 | 43<br>50 | 13 | 57 |
| 25 | 20 | 45<br>48 | 33<br>42 | 14 | 34 |
| 26 | 21 | 34<br>48 | 15<br>33 | 15 | 12 |
| 27 | 22 | 22<br>48 | 48<br>25 | 15 | 51 |
| 28 | 23 | 11<br>48 | 13<br>15 | 16 | 28 |
| 29 | 23 | 59<br>48 | 38<br>6 | 17 | 7 |
| 30 | 24 | 47<br>47 | 34<br>55 | 17 | 46 |
| 31 | 25 | 35<br>47 | 29<br>43 | 18 | 26 |
| 32 | 26 | 23<br>47 | 12<br>33 | 19 | 6 |
| 33 | 27 | 10<br>47 | 45<br>20 | 19 | 44 |
| 34 | 27 | 58<br>47 | 5<br>7 | 20 | 26 |
| 35 | 28 | 45<br>46 | 12<br>15 | 21 | 8 |
| 36 | 29 | 32<br>46 | 7<br>50 | 21 | 49 |
| 37 | 30 | 18<br>40 | 47<br>26 | 22 | 31 |
| 38 | 31 | 5<br>46 | 13<br>10 | 23 | 13 |
| 39 | 31 | 51<br>45 | 23<br>54 | 23 | 56 |
| 40 | 32 | 37<br>45 | 17<br>38 | 24 | 41 |
| 41 | 33 | 22<br>45 | 55<br>20 | 25 | 23 |
| 42 | 34 | 8<br>45 | 15<br>1 | 26 | 7 |
| 43 | 34 | 53<br>44 | 16<br>42 | 26 | 52 |
| 44 | 35 | 37<br>44 | 58<br>23 | 27 | 38 |
| 45 | 36 | 22<br>44 | 21<br>0 | 28 | 24 |
| 46 | 37 | 6<br>43 | 21<br>38 | 29 | 10 |
| 47 | 37 | 49<br>43 | 59<br>16 | 29 | 57 |
| 48 | 38 | 33<br>42 | 15<br>51 | 30 | 44 |
| 49 | 39 | 16<br>42 | 6<br>26 | 31 | 33 |
| 50 | 39 | 58<br>41 | 52<br>59 | 32 | 21 |
| 51 | 40 | 44<br>41 | 31<br>39 | 33 | 10 |
| 52 | 41 | 22<br>41 | 2<br>2 | 33 | 59 |
| 53 | 42 | 3<br>40 | 4<br>32 | 34 | 51 |
| 54 | 42 | 43<br>39 | 36<br>59 | 35 | 40 |
| 55 | 43 | 23<br>39 | 27<br>26 | 36 | 31 |
| 56 | 44 | 3<br>38 | 1<br>51 | 37 | 23 |
| 57 | 44 | 47<br>38 | 52<br>15 | 38 | 15 |
| 58 | 45 | 20<br>37 | 7<br>37 | 39 | 7 |
| 59 | 45 | 57<br>36 | 44<br>57 | 39 | 59 |
| 60 | 46 | 34<br>36 | 47<br>14 | 40 | 51 |
| 61 | 47 | 10<br>35 | 55<br>52 | 41 | 45 |
| 62 | 47 | 46<br>34 | 27<br>47 | 42 | 39 |
| 63 | 48 | 21<br>33 | 14<br>59 | 43 | 31 |
| 64 | 48 | 55<br>33 | 13<br>8 | 44 | 24 |
| 65 | 49 | 28<br>32 | 21<br>17 | 45 | 18 |
| 66 | 50 | 0<br>31 | 38<br>24 | 46 | 13 |
| 67 | 50 | 32<br>30 | 2<br>28 | 47 | 5 |
| 68 | 51 | 2<br>29 | 30<br>29 | 47 | 57 |
| 69 | 51 | 21<br>28 | 59<br>28 | 48 | 48 |
| 70 | 52 | 0<br>27 | 27<br>26 | 49 | 41 |
| 71 | 52 | 27<br>26 | 53<br>20 | 50 | 31 |
| 72 | 52 | 54<br>25 | 13<br>12 | 51 | 21 |
| 73 | 53 | 19<br>24 | 25<br>4 | 52 | 9 |
| 74 | 53 | 43<br>22 | 29<br>49 | 52 | 55 |
| 75 | 54 | 6<br>21 | 18<br>35 | 53 | 44 |
| 76 | 54 | 27<br>20 | 53<br>18 | 54 | 26 |
| 77 | 54 | 48<br>18 | 11<br>58 | 55 | 8 |
| 78 | 55 | 7<br>17 | 9<br>35 | 55 | 49 |
| 79 | 55 | 24<br>16 | 44<br>14 | 56 | 27 |
| 80 | 55 | 40<br>14 | 58<br>48 | 57 | 1 |
| 81 | 55 | 55<br>13 | 46<br>18 | 57 | 32 |
| 82 | 56 | 9<br>11 | 4<br>49 | 58 | 3 |
| 83 | 56 | 20<br>10 | 53<br>18 | 58 | 29 |
| 84 | 56 | 31<br>8 | 11<br>46 | 58 | 53 |
| 85 | 56 | 59<br>7 | 57<br>46 | 59 | 13 |
| 86 | 56 | 47<br>5 | 8<br>37 | 59 | 29 |
| 87 | 56 | 52<br>4 | 46<br>1 | 59 | 44 |
| 88 | 56 | 56<br>2 | 46<br>24 | 59 | 54 |
| 89 | 56 | 59<br>0 | 11<br>49 | 59 | 59 |
| 90 | 57 | 0<br>0 | 0<br>0 | 60 | 0 |

Arcus diei

|  | G | M | 2 | M | 2 |
|---|---|---|---|---|---|
| 1 | 0 | 50 / 50 | 53 / 53 | 0 | 33 |
| 2 | 1 | 41 / 50 | 46 / 52 | 1 | 6 |
| 3 | 2 | 32 / 50 | 38 / 51 | 1 | 39 |
| 4 | 3 | 23 / 50 | 29 / 50 | 2 | 12 |
| 5 | 4 | 14 / 50 | 19 / 49 | 2 | 44 |
| 6 | 5 | 5 / 50 | 8 / 48 | 3 | 18 |
| 7 | 5 | 55 / 50 | 56 / 45 | 3 | 50 |
| 8 | 6 | 46 / 50 | [illegible] / 44 | 4 | 23 |
| 9 | 7 | 37 / 50 | 25 / 41 | 4 | 57 |
| 10 | 8 | 28 / 50 | 6 / 38 | 5 | 30 |
| 11 | 9 | 18 / 50 | 44 / 35 | 6 | 3 |
| 12 | 10 | 9 / 50 | 19 / 32 | 6 | 37 |
| 13 | 10 | 59 / 50 | 41 / 30 | 7 | 12 |
| 14 | 11 | 50 / 50 | 21 / 24 | 7 | 44 |
| 15 | 12 | 40 / 50 | 44 / 21 | 8 | 19 |
| 16 | 13 | 31 / 50 | 6 / 16 | 8 | 54 |
| 17 | 14 | 21 / 50 | 22 / 11 | 9 | 28 |
| 18 | 15 | 11 / 50 | 33 / 6 | 10 | 2 |
| 19 | 16 | 1 / 50 | 39 / 0 | 10 | 37 |
| 20 | 16 | 51 / 49 | 39 / 55 | 11 | 13 |
| 21 | 17 | 41 / 49 | 34 / 48 | 11 | 48 |
| 22 | 18 | 31 / 49 | 32 / 43 | 12 | 23 |
| 23 | 19 | 21 / 49 | 5 / 36 | 12 | 59 |
| 24 | 20 | 10 / 49 | 40 / 21 | 13 | 36 |
| 25 | 21 | 0 / 49 | 7 / 20 | 14 | 12 |
| 26 | 21 | 49 / 49 | 27 / 12 | 14 | 49 |
| 27 | 22 | 38 / 49 | 39 / 2 | 15 | 26 |
| 28 | 23 | 27 / 48 | 41 / 44 | 16 | 4 |
| 29 | 24 | 26 / 48 | 35 / 24 | 16 | 42 |
| 30 | 25 | 4 / 48 | 20 / 34 | 17 | 20 |

Arcus diei

|  | G | M | 2 | M | 2 |
|---|---|---|---|---|---|
| 31 | 25 | 13 / 48 | 44 / 33 | 17 | 58 |
| 32 | 26 | 42 / 48 | 18 / 11 | 18 | 37 |
| 33 | 27 | 30 / 48 | 29 / 2 | 19 | 18 |
| 34 | 28 | 18 / 47 | 3 / 49 | 19 | 57 |
| 35 | 29 | 6 / 47 | 20 / 36 | 20 | 38 |
| 36 | 29 | 43 / 47 | 46 / 22 | 21 | 17 |
| 37 | 30 | 41 / 47 | 18 / 8 | 21 | 59 |
| 38 | 31 | 28 / 46 | 26 / 43 | 22 | 41 |
| 39 | 32 | 14 / 46 | 19 / 39 | 23 | 22 |
| 40 | 33 | 1 / 46 | 48 / 20 | 24 | 4 |
| 41 | 33 | 48 / 46 | 18 / 4 | 24 | 49 |
| 42 | 34 | 34 / 45 | 22 / 46 | 25 | 33 |
| 43 | 35 | 20 / 45 | 8 / 28 | 26 | 17 |
| 44 | 36 | 4 / 45 | 36 / 9 | 27 | 1 |
| 45 | 36 | 40 / 44 | 44 / 46 | 27 | 46 |
| 46 | 37 | 35 / 44 | 31 / 25 | 28 | 33 |
| 47 | 38 | 19 / 44 | 46 / 3 | 29 | 20 |
| 48 | 39 | 3 / 43 | 49 / 40 | 30 | 7 |
| 49 | 39 | 47 / 43 | 39 / 14 | 30 | 54 |
| 50 | 40 | 30 / 43 | 44 / 48 | 31 | 42 |
| 51 | 41 | 13 / 42 | 47 / 20 | 32 | 31 |
| 52 | 41 | 46 / 41 | 1 / 49 | 33 | 22 |
| 53 | 42 | 37 / 41 | 44 / 21 | 34 | 10 |
| 54 | 43 | 19 / 40 | 16 / 50 | 35 | 1 |
| 55 | 44 | 0 / 40 | 6 / 18 | 35 | 52 |
| 56 | 44 | 40 / 39 | 54 / 43 | 36 | 45 |
| 57 | 45 | 50 / 39 | 7 / 7 | 37 | 37 |
| 58 | 45 | 49 / 38 | 42 / 29 | 38 | 39 |
| 59 | 46 | 37 / 37 | 43 / 49 | 39 | 22 |
| 60 | 47 | 14 / 37 | 52 / 8 | 40 | 14 |

Arcus diei

|  | G | M | 2 | M | 2 |
|---|---|---|---|---|---|
| 61 | 47 | 52 / 36 | 40 / 26 | 41 | 10 |
| 62 | 48 | 29 / 35 | 6 / 39 | 42 | 3 |
| 63 | 49 | 4 / 34 | 54 / 52 | 42 | 57 |
| 64 | 49 | 39 / 34 | 37 / 2 | 43 | 51 |
| 65 | 50 | 15 / 33 | 39 / 12 | 44 | 47 |
| 66 | 50 | 40 / 32 | 41 / 16 | 45 | 39 |
| 67 | 51 | 19 / 31 | 7 / 20 | 46 | 33 |
| 68 | 51 | 50 / 30 | 27 / 20 | 47 | 26 |
| 69 | 52 | 20 / 29 | 47 / 21 | 48 | 22 |
| 70 | 52 | 50 / 28 | 8 / 16 | 49 | 14 |
| 71 | 53 | 18 / 27 | 24 / 10 | 50 | 6 |
| 72 | 53 | 44 / 26 | 34 / 1 | 50 | 57 |
| 73 | 54 | 11 / 24 | 39 / 49 | 51 | 48 |
| 74 | 54 | 36 / 23 | 24 / 30 | 52 | 36 |
| 75 | 55 | 0 / 22 | 0 / 19 | 53 | 24 |
| 76 | 55 | 22 / 21 | 19 / 0 | 54 | 9 |
| 77 | 55 | 43 / 19 | 19 / 39 | 54 | 52 |
| 78 | 56 | 2 / 18 | 48 / 13 | 55 | 33 |
| 79 | 56 | 21 / 16 | 11 / 48 | 56 | 13 |
| 80 | 56 | 37 / 14 | 49 / 19 | 56 | 49 |
| 81 | 56 | 43 / 13 | 18 / 49 | 57 | 24 |
| 82 | 57 | 7 / 12 | 7 / 14 | 57 | 56 |
| 83 | 57 | 19 / 10 | 22 / 42 | 58 | 26 |
| 84 | 57 | 30 / 9 | 4 / 6 | 58 | 50 |
| 85 | 57 | 39 / 7 | 20 / 21 | 59 | 11 |
| 86 | 57 | 46 / 5 | 37 / 42 | 59 | 30 |
| 87 | 57 | 42 / 4 | 29 / 11 | 59 | 44 |
| 88 | 57 | 46 / 2 | 40 / 30 | 59 | 51 |
| 89 | 57 | 49 / 0 | 10 / 50 | 59 | 58 |
| 90 | 58 | 0 / 0 | 0 / 0 | 60 | 0 |

# 59

| | Ascens | | | Dra | |
|---|---|---|---|---|---|
| | G | M | S | M | S |
| 1 | 0 | 51<br>51 | 26<br>26 | 0 | 32 |
| 2 | 1 | 42<br>51 | 52<br>25 | 1 | 3 |
| 3 | 2 | 34<br>51 | 17<br>24 | 1 | 35 |
| 4 | 3 | 25<br>51 | 41<br>23 | 2 | 7 |
| 5 | 4 | 17<br>51 | 4<br>22 | 2 | 39 |
| 6 | 5 | 8<br>51 | 26<br>20 | 3 | 12 |
| 7 | 5 | 59<br>51 | 46<br>19 | 3 | 44 |
| 8 | 6 | 51<br>51 | 5<br>17 | 4 | 16 |
| 9 | 7 | 42<br>51 | 22<br>14 | 4 | 48 |
| 10 | 8 | 33<br>51 | 36<br>11 | 5 | 20 |
| 11 | 9 | 44<br>51 | 47<br>9 | 5 | 54 |
| 12 | 10 | 15<br>51 | 56<br>7 | 6 | 27 |
| 13 | 11 | 7<br>51 | 3<br>2 | 6 | 59 |
| 14 | 11 | 48<br>50 | 5<br>59 | 7 | 33 |
| 15 | 12 | 49<br>50 | 4<br>56 | 8 | 5 |
| 16 | 13 | 40<br>50 | 0<br>50 | 8 | 38 |
| 17 | 14 | 30<br>50 | 50<br>45 | 9 | 11 |
| 18 | 15 | 21<br>50 | 35<br>41 | 9 | 46 |
| 19 | 16 | 12<br>50 | 16<br>36 | 10 | 20 |
| 20 | 17 | 2<br>50 | 42<br>30 | 10 | 53 |
| 21 | 17 | 53<br>50 | 22<br>23 | 11 | 27 |
| 22 | 18 | 43<br>50 | 44<br>19 | 12 | 3 |
| 23 | 19 | 34<br>50 | 4<br>12 | 12 | 38 |
| 24 | 20 | 24<br>50 | 16<br>3 | 13 | 14 |
| 25 | 21 | 14<br>49 | 19<br>57 | 13 | 49 |
| 26 | 22 | 4<br>49 | 16<br>49 | 14 | 25 |
| 27 | 22 | 54<br>49 | 5<br>40 | 15 | 1 |
| 28 | 23 | 45<br>49 | 44<br>32 | 15 | 38 |
| 29 | 24 | 33<br>49 | 17<br>23 | 16 | 16 |
| 30 | 25 | 22<br>49 | 40<br>13 | 16 | 52 |
| 31 | 26 | 11<br>49 | 53<br>2 | 17 | 30 |
| 32 | 27 | 0<br>48 | 55<br>52 | 18 | 9 |
| 33 | 27 | 49<br>48 | 47<br>41 | 18 | 47 |
| 34 | 28 | 38<br>48 | 28<br>30 | 19 | 25 |
| 35 | 29 | 26<br>48 | 48<br>15 | 20 | 4 |
| 36 | 30 | 15<br>48 | 13<br>4 | 20 | 46 |
| 37 | 31 | 3<br>47 | 17<br>50 | 21 | 26 |
| 38 | 31 | 51<br>47 | 7<br>34 | 22 | 8 |
| 39 | 32 | 38<br>47 | 41<br>22 | 22 | 50 |
| 40 | 33 | 26<br>47 | 3<br>4 | 23 | 30 |
| 41 | 34 | 13<br>46 | 7<br>48 | 24 | 13 |
| 42 | 34 | 59<br>46 | 55<br>30 | 24 | 56 |
| 43 | 35 | 46<br>46 | 25<br>12 | 25 | 41 |
| 44 | 36 | 33<br>45 | 37<br>42 | 26 | 24 |
| 45 | 37 | 18<br>44 | 31<br>33 | 27 | 9 |
| 46 | 38 | 4<br>44 | 4<br>12 | 27 | 55 |
| 47 | 38 | 49<br>43 | 16<br>50 | 28 | 41 |
| 48 | 39 | 34<br>44 | 6<br>27 | 29 | 28 |
| 49 | 40 | 18<br>44 | 33<br>2 | 30 | 15 |
| 50 | 41 | 2<br>43 | 35<br>37 | 31 | 3 |
| 51 | 41 | 46<br>43 | 12<br>11 | 31 | 52 |
| 52 | 42 | 29<br>42 | 23<br>42 | 32 | 41 |
| 53 | 43 | 12<br>42 | 5<br>12 | 33 | 31 |
| 54 | 43 | 44<br>41 | 17<br>41 | 34 | 22 |
| 55 | 44 | 35<br>41 | 48<br>11 | 35 | 14 |
| 56 | 44 | 17<br>40 | 9<br>35 | 36 | 5 |
| 57 | 45 | 57<br>39 | 44<br>49 | 36 | 57 |
| 58 | 46 | 37<br>39 | 43<br>22 | 37 | 49 |
| 59 | 47 | 17<br>38 | 4<br>42 | 38 | 42 |
| 60 | 47 | 55<br>38 | 47<br>3 | 39 | 38 |
| 61 | 48 | 33<br>37 | 40<br>19 | 40 | 31 |
| 62 | 49 | 11<br>36 | 19<br>33 | 41 | 25 |
| 63 | 49 | 47<br>35 | 42<br>46 | 42 | 21 |
| 64 | 50 | 23<br>34 | 28<br>48 | 43 | 16 |
| 65 | 50 | 48<br>34 | 26<br>4 | 44 | 10 |
| 66 | 51 | 32<br>33 | 30<br>10 | 45 | 6 |
| 67 | 52 | 5<br>32 | 40<br>13 | 46 | 1 |
| 68 | 52 | 37<br>31 | 43<br>16 | 46 | 57 |
| 69 | 53 | 9<br>30 | 9<br>13 | 47 | 51 |
| 70 | 53 | 39<br>29 | 22<br>8 | 48 | 41 |
| 71 | 54 | 8<br>28 | 30<br>1 | 49 | 39 |
| 72 | 54 | 56<br>26 | 51<br>51 | 50 | 32 |
| 73 | 55 | 3<br>25 | 22<br>58 | 51 | 24 |
| 74 | 55 | 29<br>24 | 0<br>24 | 52 | 13 |
| 75 | 55 | 53<br>23 | 24<br>4 | 53 | 2 |
| 76 | 56 | 16<br>21 | 28<br>43 | 53 | 50 |
| 77 | 56 | 38<br>20 | 11<br>20 | 54 | 36 |
| 78 | 56 | 48<br>18 | 31<br>51 | 55 | 20 |
| 79 | 57 | 17<br>17 | 24<br>24 | 56 | 3 |
| 80 | 57 | 34<br>15 | 48<br>49 | 56 | 42 |
| 81 | 57 | 50<br>14 | 42<br>21 | 57 | 18 |
| 82 | 58 | 5<br>12 | 3<br>44 | 57 | 49 |
| 83 | 58 | 17<br>11 | 48<br>6 | 58 | 18 |
| 84 | 58 | 28<br>9 | 47<br>27 | 58 | 44 |
| 85 | 58 | 38<br>7 | 21<br>46 | 59 | 7 |
| 86 | 58 | 46<br>6 | 7<br>3 | 59 | 24 |
| 87 | 58 | 52<br>4 | 10<br>21 | 59 | 40 |
| 88 | 58 | 56<br>2 | 31<br>37 | 59 | 51 |
| 89 | 58 | 59<br>0 | 8<br>52 | 59 | 57 |
| 90 | 59 | 0<br>0 | 0<br>0 | 60 | 0 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 51 / 51 | 58 / 57 | 0 | 31 | 31 | 26 | 29 / 49 | 33 / 41 | 17 | 1 | 61 | 49 | 14 / 38 | 21 / 13 | 39 | 51 |
| 2 | 1 | 43 / 51 | 55 / 57 | 1 | 2 | 32 | 27 | 19 / 49 | 4 / 30 | 17 | 38 | 62 | 49 | 52 / 37 | 34 / 29 | 40 | 47 |
| 3 | 2 | 35 / 51 | 52 / 56 | 1 | 33 | 33 | 28 | 8 / 49 | 34 / 19 | 18 | 16 | 63 | 50 | 30 / 36 | 3 / 47 | 41 | 42 |
| 4 | 3 | 27 / 51 | 48 / 55 | 2 | 4 | 34 | 28 | 57 / 49 | 53 / 9 | 18 | 56 | 64 | 51 | 6 / 35 | 44 / 52 | 42 | 38 |
| 5 | 4 | 19 / 51 | 43 / 54 | 2 | 35 | 35 | 29 | 47 / 48 | 2 / 57 | 19 | 34 | 65 | 51 | 42 / 35 | 36 / 0 | 43 | 34 |
| 6 | 5 | 11 / 51 | 38 / 52 | 3 | 6 | 36 | 30 | 35 / 48 | 59 / 44 | 20 | 13 | 66 | 52 | 17 / 34 | 36 / 5 | 44 | 31 |
| 7 | 6 | 3 / 51 | 30 / 51 | 3 | 37 | 37 | 31 | 24 / 48 | 43 / 32 | 20 | 52 | 67 | 52 | 51 / 33 | 47 / 9 | 45 | 28 |
| 8 | 6 | 55 / 51 | 21 / 49 | 4 | 9 | 38 | 32 | 13 / 48 | 14 / 16 | 21 | 32 | 68 | 53 | 24 / 32 | 50 / 10 | 46 | 24 |
| 9 | 7 | 47 / 51 | 10 / 46 | 4 | 40 | 39 | 33 | 1 / 48 | 31 / 2 | 22 | 14 | 69 | 53 | 57 / 31 | 0 / 7 | 47 | 19 |
| 10 | 8 | 38 / 51 | 56 / 45 | 5 | 12 | 40 | 33 | 49 / 47 | 33 / 47 | 22 | 55 | 70 | 54 | 28 / 30 | 7 / 2 | 48 | 14 |
| 11 | 9 | 30 / 51 | 41 / 42 | 5 | 43 | 41 | 34 | 37 / 47 | 20 / 31 | 23 | 36 | 71 | 54 | 58 / 28 | 9 / 42 | 49 | 10 |
| 12 | 10 | 22 / 51 | 23 / 39 | 6 | 14 | 42 | 35 | 24 / 47 | 51 / 14 | 24 | 19 | 72 | 55 | 27 / 27 | 3 / 43 | 50 | 5 |
| 13 | 11 | 14 / 51 | 2 / 36 | 6 | 46 | 43 | 36 | 12 / 46 | 6 / 56 | 25 | 2 | 73 | 55 | 54 / 26 | 46 / 21 | 50 | 58 |
| 14 | 12 | 5 / 51 | 38 / 31 | 7 | 19 | 44 | 36 | 59 / 46 | 2 / 38 | 25 | 47 | 74 | 56 | 21 / 24 | 13 / 13 | 51 | 52 |
| 15 | 13 | 57 / 51 | 9 / 29 | 7 | 51 | 45 | 37 | 45 / 46 | 40 / 19 | 26 | 31 | 75 | 56 | 46 / 23 | 36 / 52 | 52 | 43 |
| 16 | 13 | 48 / 51 | 38 / 23 | 8 | 23 | 46 | 38 | 31 / 45 | 59 / 58 | 27 | 15 | 76 | 57 | 10 / 22 | 18 / 29 | 53 | 32 |
| 17 | 14 | 40 / 51 | 1 / 20 | 8 | 56 | 47 | 39 | 17 / 45 | 57 / 37 | 28 | 2 | 77 | 57 | 33 / 21 | 47 / 4 | 54 | 20 |
| 18 | 15 | 31 / 51 | 21 / 15 | 9 | 29 | 48 | 40 | 3 / 45 | 34 / 14 | 28 | 47 | 78 | 57 | 53 / 19 | 51 / 36 | 55 | 6 |
| 19 | 16 | 22 / 51 | 36 / 9 | 10 | 2 | 49 | 40 | 48 / 44 | 48 / 40 | 29 | 35 | 79 | 58 | 13 / 18 | 27 / 3 | 55 | 48 |
| 20 | 17 | 13 / 51 | 45 / 4 | 10 | 36 | 50 | 41 | 33 / 44 | 38 / 26 | 30 | 23 | 80 | 58 | 31 / 16 | 30 / 30 | 56 | 28 |
| 21 | 18 | 4 / 50 | 49 / 59 | 11 | 9 | 51 | 42 | 18 / 44 | 4 / 0 | 31 | 11 | 81 | 58 | 46 / 14 | 0 / 52 | 57 | 6 |
| 22 | 18 | 55 / 50 | 48 / 54 | 11 | 44 | 52 | 43 | 2 / 43 | 4 / 32 | 31 | 49 | 82 | 59 | 2 / 13 | 52 / 14 | 57 | 41 |
| 23 | 19 | 46 / 50 | 43 / 47 | 12 | 18 | 53 | 44 | 45 / 43 | 36 / 3 | 32 | 49 | 83 | 59 | 16 / 11 | 6 / 32 | 58 | 14 |
| 24 | 20 | 37 / 50 | 29 / 39 | 12 | 51 | 54 | 45 | 28 / 42 | 39 / 33 | 33 | 39 | 84 | 59 | 27 / 9 | 38 / 50 | 58 | 41 |
| 25 | 21 | 28 / 50 | 8 / 33 | 13 | 26 | 55 | 45 | 11 / 42 | 12 / 1 | 34 | 31 | 85 | 59 | 37 / 8 | 28 / 4 | 59 | 5 |
| 26 | 22 | 18 / 50 | 41 / 25 | 14 | 1 | 56 | 46 | 53 / 41 | 13 / 28 | 35 | 33 | 86 | 59 | 45 / 6 | 33 / 18 | 59 | 26 |
| 27 | 23 | 9 / 50 | 6 / 17 | 14 | 36 | 57 | 47 | 34 / 40 | 41 / 51 | 36 | 14 | 87 | 59 | 51 / 4 | 50 / 32 | 59 | 42 |
| 28 | 23 | 59 / 50 | 23 / 10 | 15 | 12 | 58 | 47 | 15 / 40 | 32 / 15 | 37 | 8 | 88 | 59 | 56 / 2 | 22 / 42 | 59 | 52 |
| 29 | 24 | 49 / 49 | 33 / 49 | 15 | 47 | 59 | 48 | 55 / 39 | 47 / 38 | 38 | 3 | 89 | 59 | 59 / 0 | 5 / 55 | 59 | 58 |
| 30 | 25 | 39 / 49 | 22 / 41 | 16 | 25 | 60 | 49 | 35 / 38 | 25 / 56 | 38 | 56 | 90 | 60 | 0 / 0 | 0 / 0 | 60 | 0 |

.61

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | [illegible] | 52 | 52 | 39 | 28 | 0 | 30 |
| 2 | 1 | 44 | 52 | 57 | 28 | 1 | 0 |
| 3 | 2 | 37 | 52 | 25 | 27 | 1 | 30 |
| 4 | 3 | 29 | 52 | 52 | 26 | 2 | 0 |
| 5 | 4 | 22 | 52 | 18 | 26 | 2 | 31 |
| 6 | 5 | 14 | 52 | 44 | 23 | 3 | 0 |
| 7 | 6 | 7 | 52 | 7 | 23 | 3 | 31 |
| 8 | 6 | 59 | 52 | 30 | 20 | 4 | [illegible] |
| 9 | 7 | 51 | 52 | 50 | 18 | 4 | 31 |
| 10 | 8 | 44 | 52 | 8 | 16 | 5 | 2 |
| 11 | 9 | 36 | 52 | 34 | 13 | 5 | 32 |
| 12 | 10 | 28 | 52 | 37 | 11 | 6 | 4 |
| 13 | 11 | 20 | 52 | 48 | 9 | 6 | 34 |
| 14 | 12 | 12 | 52 | 57 | 3 | 7 | 4 |
| 15 | 13 | 5 | 52 | 0 | 1 | 7 | 37 |
| 16 | 13 | 57 | 51 | 1 | 16 | 8 | 8 |
| 17 | 14 | 48 | 51 | 57 | 53 | 8 | 40 |
| 18 | 15 | 40 | 51 | 50 | 48 | 9 | 11 |
| 19 | 16 | 32 | 51 | 38 | 43 | 9 | 43 |
| 20 | 17 | 24 | 51 | 21 | 37 | 10 | 16 |
| 21 | 18 | 14 | 51 | 48 | 34 | 10 | 50 |
| 22 | 19 | 7 | 51 | 32 | 28 | 11 | 22 |
| 23 | 19 | 49 | 51 | 0 | 20 | 11 | 54 |
| 24 | 20 | 40 | 51 | 20 | 14 | 12 | 28 |
| 25 | 21 | 41 | 51 | 34 | 8 | 13 | 2 |
| 26 | 22 | 32 | 51 | 42 | 0 | 13 | 36 |
| 27 | 23 | 23 | 50 | 42 | 53 | 14 | 10 |
| 28 | 24 | 14 | 50 | 35 | 44 | 14 | 44 |
| 29 | 25 | 5 | 50 | 30 | 37 | 15 | 21 |
| 30 | 25 | 55 | 50 | 57 | 27 | 15 | 56 |
| 31 | 26 | 46 | 50 | 29 | 18 | 16 | 32 |
| 32 | 27 | 36 | 50 | 46 | 8 | 17 | 8 |
| 33 | 28 | 26 | 49 | 50 | 49 | 17 | 46 |
| 34 | 29 | 16 | 49 | 49 | 47 | 18 | 23 |
| 35 | 30 | 6 | 49 | 36 | 36 | 19 | 1 |
| 36 | 30 | 56 | 49 | 12 | 23 | 19 | 39 |
| 37 | 31 | 45 | 49 | 35 | 12 | 20 | 18 |
| 38 | 32 | 34 | 48 | 47 | 58 | 20 | 57 |
| 39 | 33 | 23 | 48 | 44 | 43 | 21 | 37 |
| 40 | 34 | 12 | 48 | 28 | 28 | 22 | 18 |
| 41 | 34 | 0 | 48 | 56 | 14 | 22 | 59 |
| 42 | 35 | 49 | 47 | 10 | 48 | 23 | 40 |
| 43 | 36 | 37 | 47 | 8 | 41 | 24 | 24 |
| 44 | 37 | 34 | 47 | 49 | 22 | 25 | 6 |
| 45 | 38 | 12 | 47 | 11 | 3 | 25 | 50 |
| 46 | 38 | 49 | 46 | 14 | 44 | 26 | 34 |
| 47 | 39 | 44 | 46 | 49 | 23 | 27 | 19 |
| 48 | 40 | 32 | 46 | 34 | 1 | 28 | 5 |
| 49 | 41 | 18 | 45 | 33 | 38 | 28 | 42 |
| 50 | 42 | 4 | 44 | 1 | 14 | 29 | 40 |
| 51 | 42 | 49 | 44 | 14 | 48 | 30 | 28 |
| 52 | 43 | 34 | 44 | 3 | 22 | 31 | 17 |
| 53 | 44 | 18 | 43 | 24 | 53 | 32 | 6 |
| 54 | 44 | 2 | 43 | 18 | 24 | 32 | 57 |
| 55 | 44 | 44 | 42 | 45 | 43 | 33 | 47 |
| 56 | 46 | 28 | 42 | 36 | 19 | 34 | 38 |
| 57 | 47 | 10 | 41 | 44 | 45 | 35 | 32 |
| 58 | 47 | 42 | 41 | 40 | 10 | 36 | 26 |
| 59 | 48 | 33 | 40 | 40 | 31 | 37 | 19 |
| 60 | 49 | 14 | 39 | 21 | 41 | 38 | 13 |
| 61 | 49 | 44 | 39 | 12 | 9 | 39 | 9 |
| 62 | 50 | 33 | 38 | 21 | 34 | 40 | 4 |
| 63 | 51 | 11 | 37 | 24 | 31 | 41 | 0 |
| 64 | 51 | 49 | 36 | 22 | 48 | 41 | 57 |
| 65 | 52 | 26 | 35 | 10 | 57 | 42 | 55 |
| 66 | 53 | 2 | 35 | 7 | 2 | 43 | 53 |
| 67 | 53 | 37 | 34 | 9 | 5 | 44 | 49 |
| 68 | 54 | 11 | 33 | 14 | 5 | 45 | 47 |
| 69 | 54 | 44 | 32 | 19 | 2 | 46 | 44 |
| 70 | 55 | 16 | 30 | 21 | 48 | 47 | 43 |
| 71 | 55 | 47 | 29 | 19 | 49 | 48 | 39 |
| 72 | 56 | 47 | 28 | 8 | 36 | 49 | 34 |
| 73 | 56 | 44 | 27 | 44 | 21 | 50 | 31 |
| 74 | 57 | 13 | 26 | 5 | 4 | 51 | 27 |
| 75 | 57 | 39 | 24 | 9 | 41 | 52 | 19 |
| 76 | 58 | 3 | 23 | 50 | 17 | 53 | 11 |
| 77 | 58 | 27 | 21 | 7 | 50 | 54 | 1 |
| 78 | 58 | 48 | 20 | 57 | 18 | 54 | 49 |
| 79 | 59 | 5 | 18 | 14 | 43 | 55 | 33 |
| 80 | 59 | 27 | 17 | 58 | 8 | 56 | 19 |
| 81 | 59 | 44 | 14 | 6 | 27 | 56 | 57 |
| 82 | 60 | 0 | 13 | 33 | 47 | 57 | 34 |
| 83 | 60 | 14 | 11 | 20 | 49 | 58 | 6 |
| 84 | 60 | 26 | 10 | 19 | 14 | 58 | 36 |
| 85 | 60 | 36 | 8 | 33 | 27 | 59 | 0 |
| 86 | 60 | 44 | 6 | 48 | 34 | 59 | 21 |
| 87 | 60 | 41 | 4 | 32 | 42 | 59 | 37 |
| 88 | 60 | 16 | 2 | 14 | 49 | 59 | 50 |
| 89 | 60 | 49 | 0 | 3 | 57 | 59 | 58 |
| 90 | 61 | 0 | 0 | 0 | 0 | 60 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 52 | 59 | 52 | 58 | 0 | 29 |
| 2 | 1 | 45 | 57 | 52 | 58 | 0 | 58 |
| 3 | 2 | 38 | 55 | 52 | 57 | 1 | 27 |
| 4 | 3 | 31 | 52 | 52 | 57 | 1 | 56 |
| 5 | 4 | 34 | 49 | 52 | 55 | 2 | 25 |
| 6 | 5 | 17 | 44 | 52 | 54 | 2 | 54 |
| 7 | 6 | 10 | 38 | 52 | 53 | 3 | 24 |
| 8 | 7 | 3 | 31 | 52 | 50 | 3 | 53 |
| 9 | 7 | 56 | 21 | 52 | 49 | 4 | 23 |
| 10 | 8 | 49 | 10 | 52 | 46 | 4 | 52 |
| 11 | 9 | 41 | 56 | 52 | 45 | 5 | 22 |
| 12 | 10 | 34 | 41 | 52 | 41 | 5 | 51 |
| 13 | 11 | 27 | 22 | 52 | 39 | 6 | 21 |
| 14 | 12 | 20 | 1 | 52 | 36 | 6 | 51 |
| 15 | 13 | 12 | 37 | 52 | 32 | 7 | 22 |
| 16 | 14 | 5 | 9 | 52 | 28 | 7 | 52 |
| 17 | 14 | 57 | 37 | 52 | 24 | 8 | 23 |
| 18 | 15 | 50 | 1 | 52 | 20 | 8 | 54 |
| 19 | 16 | 42 | 21 | 52 | 16 | 9 | 25 |
| 20 | 17 | 33 | 37 | 52 | 11 | 9 | 56 |
| 21 | 18 | 26 | 48 | 52 | 6 | 10 | 28 |
| 22 | 19 | 18 | 54 | 52 | 0 | 11 | 0 |
| 23 | 20 | 10 | 54 | 51 | 54 | 11 | 32 |
| 24 | 21 | 2 | 48 | 51 | 48 | 12 | 5 |
| 25 | 21 | 54 | 36 | 51 | 42 | 12 | 38 |
| 26 | 22 | 46 | 18 | 51 | 34 | 13 | 11 |
| 27 | 23 | 37 | 52 | 51 | 28 | 13 | 45 |
| 28 | 24 | 29 | 20 | 51 | 21 | 14 | 19 |
| 29 | 25 | 20 | 41 | 51 | 12 | 14 | 53 |
| 30 | 26 | 11 | 53 | 51 | 3 | 15 | 27 |
| 31 | 27 | 2 | 56 | 50 | 54 | 16 | 2 |
| 32 | 27 | 53 | 50 | 50 | 46 | 16 | 39 |
| 33 | 28 | 44 | 36 | 50 | 36 | 17 | 15 |
| 34 | 29 | 35 | 12 | 50 | 25 | 17 | 50 |
| 35 | 30 | 25 | 37 | 50 | 14 | 18 | 27 |
| 36 | 31 | 15 | 51 | 50 | 2 | 19 | 4 |
| 37 | 32 | 5 | 53 | 49 | 51 | 19 | 43 |
| 38 | 32 | 55 | 44 | 49 | 38 | 20 | 21 |
| 39 | 33 | 45 | 22 | 49 | 24 | 21 | 0 |
| 40 | 34 | 34 | 46 | 49 | 9 | 21 | 40 |
| 41 | 35 | 23 | 55 | 48 | 55 | 22 | 22 |
| 42 | 36 | 12 | 40 | 48 | 42 | 23 | 3 |
| 43 | 37 | 1 | 32 | 48 | 23 | 23 | 43 |
| 44 | 37 | 49 | 44 | 48 | 6 | 24 | 26 |
| 45 | 38 | 38 | 1 | 47 | 47 | 25 | 9 |
| 46 | 39 | 25 | 48 | 47 | 30 | 25 | 55 |
| 47 | 40 | 13 | 18 | 47 | 9 | 26 | 38 |
| 48 | 41 | 0 | 27 | 46 | 48 | 27 | 22 |
| 49 | 41 | 47 | 15 | 46 | 26 | 28 | 8 |
| 50 | 42 | 33 | 41 | 46 | 2 | 28 | 55 |
| 51 | 43 | 19 | 43 | 45 | 37 | 29 | 42 |
| 52 | 44 | 5 | 20 | 45 | 11 | 30 | 31 |
| 53 | 44 | 50 | 31 | 44 | 44 | 31 | 22 |
| 54 | 45 | 35 | 15 | 44 | 15 | 32 | 11 |
| 55 | 46 | 19 | 30 | 43 | 44 | 33 | 2 |
| 56 | 47 | 3 | 14 | 43 | 13 | 33 | 54 |
| 57 | 47 | 46 | 27 | 42 | 39 | 34 | 47 |
| 58 | 48 | 29 | 6 | 42 | 3 | 35 | 29 |
| 59 | 49 | 11 | 9 | 41 | 25 | 36 | 33 |
| 60 | 49 | 52 | 34 | 40 | 47 | 37 | 29 |
| 61 | 50 | 33 | 21 | 40 | 4 | 38 | 34 |
| 62 | 51 | 13 | 25 | 39 | 20 | 39 | 50 |
| 63 | 51 | 52 | 41 | 38 | 34 | 40 | 18 |
| 64 | 52 | 31 | 19 | 37 | 46 | 41 | 15 |
| 65 | 53 | 9 | 5 | 36 | 55 | 42 | 13 |
| 66 | 53 | 46 | 0 | 35 | 58 | 43 | 10 |
| 67 | 54 | 21 | 58 | 35 | 3 | 44 | 10 |
| 68 | 54 | 57 | 1 | 34 | 3 | 45 | 10 |
| 69 | 55 | 31 | 4 | 33 | 0 | 46 | 9 |
| 70 | 56 | 4 | 4 | 31 | 54 | 47 | 7 |
| 71 | 56 | 35 | 58 | 30 | 45 | 48 | 6 |
| 72 | 57 | 6 | 33 | 29 | 32 | 49 | 4 |
| 73 | 57 | 30 | 15 | 28 | 17 | 50 | 2 |
| 74 | 58 | 4 | 32 | 26 | 56 | 50 | 57 |
| 75 | 58 | 31 | 28 | 25 | 33 | 51 | 53 |
| 76 | 58 | 57 | 1 | 24 | 7 | 52 | 48 |
| 77 | 59 | 21 | 8 | 22 | 38 | 53 | 40 |
| 78 | 59 | 43 | 46 | 21 | 2 | 54 | 30 |
| 79 | 60 | 4 | 48 | 19 | 25 | 55 | 19 |
| 80 | 60 | 24 | 17 | 17 | 46 | 56 | 2 |
| 81 | 60 | 42 | 3 | 16 | 4 | 56 | 44 |
| 82 | 60 | 58 | 7 | 14 | 19 | 57 | 23 |
| 83 | 61 | 12 | 26 | 12 | 29 | 57 | 58 |
| 84 | 61 | 24 | 55 | 10 | 38 | 58 | 30 |
| 85 | 61 | 35 | 33 | 8 | 46 | 58 | 59 |
| 86 | 61 | 44 | 19 | 6 | 50 | 59 | 20 |
| 87 | 61 | 51 | 9 | 4 | 55 | 59 | 39 |
| 88 | 61 | 56 | 4 | 2 | 57 | 59 | 51 |
| 89 | 61 | 59 | 1 | 0 | 59 | 59 | 58 |
| 90 | 62 | 0 | 0 | 0 | 0 | 60 | 0 |

# 63

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 0 | 53<br>53 | 28<br>27 | 0 | 28 |
| 2 | 1 | 46<br>53 | 44<br>27 | 0 | 56 |
| 3 | 2 | 40<br>53 | 22<br>26 | 1 | 24 |
| 4 | 3 | 33<br>53 | 48<br>20 | 1 | 53 |
| 5 | 4 | 27<br>53 | 14<br>24 | 2 | 20 |
| 6 | 5 | 20<br>53 | 38<br>34 | 2 | 49 |
| 7 | 6 | 14<br>53 | 2<br>22 | 3 | 17 |
| 8 | 7 | 7<br>53 | 24<br>20 | 3 | 45 |
| 9 | 8 | 0<br>53 | 44<br>18 | 4 | 13 |
| 10 | 8 | 54<br>53 | 2<br>16 | 4 | 42 |
| 11 | 9 | 47<br>53 | 18<br>14 | 5 | 11 |
| 12 | 10 | 40<br>53 | 32<br>11 | 5 | 40 |
| 13 | 11 | 33<br>53 | 42<br>9 | 6 | 10 |
| 14 | 12 | 26<br>53 | 52<br>7 | 6 | 39 |
| 15 | 13 | 19<br>53 | 49<br>2 | 7 | 7 |
| 16 | 14 | 13<br>52 | 1<br>49 | 7 | 37 |
| 17 | 15 | 6<br>52 | 0<br>44 | 8 | 7 |
| 18 | 15 | 58<br>52 | 44<br>46 | 8 | 37 |
| 19 | 16 | 51<br>52 | 46<br>47 | 9 | 7 |
| 20 | 17 | 44<br>52 | 33<br>43 | 9 | 37 |
| 21 | 18 | 37<br>52 | 16<br>38 | 10 | 7 |
| 22 | 19 | 29<br>52 | 44<br>32 | 10 | 39 |
| 23 | 20 | 22<br>52 | 26<br>27 | 11 | 11 |
| 24 | 21 | 14<br>52 | 53<br>20 | 11 | 41 |
| 25 | 22 | 7<br>52 | 14<br>14 | 12 | 13 |
| 26 | 22 | 59<br>52 | 29<br>8 | 12 | 44 |
| 27 | 23 | 51<br>52 | 37<br>2 | 13 | 17 |
| 28 | 24 | 43<br>51 | 39<br>54 | 13 | 51 |
| 29 | 25 | 35<br>51 | 34<br>44 | 14 | 24 |
| 30 | 26 | 27<br>51 | 20<br>38 | 14 | 58 |
| 31 | 27 | 18<br>51 | 58<br>31 | 15 | 33 |
| 32 | 28 | 10<br>51 | 29<br>22 | 16 | 7 |
| 33 | 29 | 1<br>51 | 51<br>11 | 16 | 42 |
| 34 | 29 | 53<br>50 | 2<br>2 | 17 | 18 |
| 35 | 30 | 44<br>50 | 4<br>51 | 17 | 53 |
| 36 | 31 | 34<br>50 | 55<br>41 | 18 | 31 |
| 37 | 32 | 25<br>50 | 36<br>29 | 19 | 7 |
| 38 | 33 | 16<br>50 | 5<br>17 | 19 | 46 |
| 39 | 34 | 6<br>50 | 22<br>4 | 20 | 24 |
| 40 | 34 | 56<br>49 | 26<br>51 | 21 | 2 |
| 41 | 35 | 46<br>49 | 17<br>36 | 21 | 42 |
| 42 | 36 | 35<br>49 | 53<br>22 | 22 | 23 |
| 43 | 37 | 25<br>49 | 14<br>6 | 23 | 3 |
| 44 | 38 | 12<br>48 | 21<br>49 | 23 | 44 |
| 45 | 39 | 3<br>48 | 10<br>33 | 24 | 28 |
| 46 | 39 | 51<br>48 | 43<br>53 | 25 | 9 |
| 47 | 40 | 39<br>47 | 56<br>53 | 25 | 53 |
| 48 | 41 | 27<br>47 | 49<br>34 | 26 | 39 |
| 49 | 42 | 14<br>47 | 23<br>13 | 27 | 24 |
| 50 | 43 | 2<br>46 | 36<br>49 | 28 | 10 |
| 51 | 43 | 49<br>46 | 25<br>26 | 28 | 58 |
| 52 | 44 | 35<br>46 | 51<br>2 | 29 | 45 |
| 53 | 45 | 21<br>45 | 43<br>33 | 30 | 33 |
| 54 | 46 | 7<br>45 | 26<br>6 | 31 | 23 |
| 55 | 46 | 42<br>44 | 32<br>36 | 32 | 14 |
| 56 | 47 | 37<br>44 | 8<br>6 | 33 | 7 |
| 57 | 48 | 21<br>43 | 14<br>31 | 33 | 59 |
| 58 | 49 | 4<br>42 | 24<br>47 | 34 | 42 |
| 59 | 49 | 47<br>42 | 43<br>21 | 35 | 46 |
| 60 | 50 | 30<br>40 | 3<br>42 | 36 | 41 |
| 61 | 51 | 11<br>47 | 45<br>0 | 37 | 37 |
| 62 | 51 | 52<br>40 | 45<br>18 | 38 | 34 |
| 63 | 52 | 33<br>39 | 3<br>31 | 39 | 31 |
| 64 | 53 | 12<br>38 | 34<br>44 | 40 | 30 |
| 65 | 53 | 51<br>37 | 18<br>52 | 41 | 28 |
| 66 | 54 | 20<br>36 | 10<br>48 | 42 | 27 |
| 67 | 55 | 6<br>36 | 8<br>3 | 43 | 27 |
| 68 | 55 | 42<br>35 | 11<br>2 | 44 | 28 |
| 69 | 56 | 17<br>33 | 13<br>58 | 45 | 28 |
| 70 | 56 | 51<br>32 | 11<br>53 | 46 | 29 |
| 71 | 57 | 24<br>31 | 4<br>43 | 47 | 30 |
| 72 | 57 | 55<br>30 | 47<br>30 | 48 | 30 |
| 73 | 58 | 26<br>29 | 17<br>12 | 49 | 29 |
| 74 | 58 | 55<br>27 | 29<br>52 | 50 | 27 |
| 75 | 59 | 23<br>26 | 21<br>28 | 51 | 24 |
| 76 | 59 | 49<br>24 | 45<br>59 | 52 | 23 |
| 77 | 60 | 14<br>23 | 48<br>28 | 53 | 18 |
| 78 | 60 | 38<br>21 | 16<br>51 | 54 | 9 |
| 79 | 61 | 0<br>20 | 7<br>12 | 55 | 0 |
| 80 | 61 | 20<br>18 | 19<br>29 | 55 | 48 |
| 81 | 61 | 38<br>16 | 48<br>42 | 56 | 34 |
| 82 | 61 | 55<br>14 | 30<br>54 | 57 | 15 |
| 83 | 62 | 10<br>13 | 24<br>1 | 57 | 52 |
| 84 | 62 | 23<br>11 | 25<br>7 | 58 | 25 |
| 85 | 62 | 34<br>9 | 32<br>7 | 58 | 52 |
| 86 | 62 | 43<br>7 | 39<br>9 | 59 | 16 |
| 87 | 62 | 50<br>5 | 48<br>7 | 59 | 34 |
| 88 | 62 | 55<br>3 | 55<br>4 | 59 | 47 |
| 89 | 62 | 58<br>1 | 59<br>1 | 59 | 56 |
| 90 | 63 | 0<br>0 | 0<br>0 | 60 | 0 |

# 64

| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 52/53 | 56/55 | 0 | 27 |
| 2 | 1 | 47/53 | 51/55 | 0 | 54 |
| 3 | 2 | 41/53 | 46/55 | 1 | 21 |
| 4 | 3 | 35/53 | 41/53 | 1 | 48 |
| 5 | 4 | 29/53 | 34/53 | 2 | 16 |
| 6 | 5 | 23/53 | 27/52 | 2 | 43 |
| 7 | 6 | 17/53 | 19/50 | 3 | 10 |
| 8 | 7 | 11/53 | 9/48 | 3 | 37 |
| 9 | 8 | 4/53 | 57/47 | 4 | 6 |
| 10 | 8 | 58/53 | 44/41 | 4 | 33 |
| 11 | 9 | 52/53 | 29/43 | 5 | 1 |
| 12 | 10 | 46/53 | 12/41 | 5 | 28 |
| 13 | 11 | 39/53 | 53/38 | 5 | 57 |
| 14 | 12 | 33/53 | 31/35 | 6 | 25 |
| 15 | 13 | 27/53 | 6/32 | 6 | 53 |
| 16 | 14 | 20/53 | 38/29 | 7 | 21 |
| 17 | 15 | 14/53 | 7/25 | 7 | 49 |
| 18 | 16 | 7/53 | 32/21 | 8 | 18 |
| 19 | 17 | 0/53 | 53/17 | 8 | 48 |
| 20 | 17 | 54/53 | 10/13 | 9 | 18 |
| 21 | 18 | 47/53 | 23/10 | 9 | 47 |
| 22 | 19 | 40/53 | 33/4 | 10 | 16 |
| 23 | 20 | 33/52 | 37/57 | 10 | 46 |
| 24 | 21 | 26/52 | 34/53 | 11 | 18 |
| 25 | 22 | 19/52 | 27/47 | 11 | 49 |
| 26 | 23 | 12/52 | 14/40 | 12 | 20 |
| 27 | 24 | 4/52 | 54/36 | 12 | 52 |
| 28 | 24 | 57/52 | 30/28 | 13 | 24 |
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| 35 | 31 | 1/51 | 57/29 | 17 | 20 |
| 36 | 31 | 53/51 | 26/17 | 17 | 54 |
| 37 | 32 | 44/51 | 43/8 | 18 | 32 |
| 38 | 33 | 35/50 | 51/55 | 19 | 7 |
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| 40 | 35 | 17/50 | 28/31 | 20 | 23 |
| 41 | 36 | 7/50 | 59/17 | 21 | 2 |
| 42 | 36 | 58/50 | 16/2 | 21 | 41 |
| 43 | 37 | 48/49 | 18/48 | 22 | 21 |
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| 46 | 40 | 16/48 | 52/57 | 24 | 26 |
| 47 | 41 | 5/48 | 49/39 | 25 | 9 |
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| 49 | 42 | 42/47 | 48/58 | 26 | 37 |
| 50 | 43 | 30/47 | 46/37 | 27 | 23 |
| 51 | 44 | 18/47 | 23/13 | 28 | 9 |
| 52 | 45 | 5/46 | 36/50 | 28 | 58 |
| 53 | 45 | 52/46 | 26/23 | 29 | 46 |
| 54 | 46 | 38/45 | 49/57 | 30 | 35 |
| 55 | 47 | 34/45 | 46/29 | 31 | 25 |
| 56 | 48 | 10/44 | 15/58 | 32 | 16 |
| 57 | 48 | 55/44 | 13/24 | 33 | 8 |
| 58 | 49 | 39/43 | 37/51 | 34 | 2 |
| 59 | 50 | 23/43 | 28/16 | 34 | 58 |
| 60 | 51 | 6/42 | 44/38 | 35 | 52 |

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| 62 | 52 | 31/41 | 19/15 | 37 | 46 |
| 63 | 53 | 12/40 | 34/30 | 38 | 44 |
| 64 | 53 | 53/39 | 4/42 | 39 | 42 |
| 65 | 54 | 32/38 | 46/51 | 40 | 42 |
| 66 | 55 | 11/37 | 37/58 | 41 | 44 |
| 67 | 55 | 49/37 | 35/4 | 42 | 41 |
| 68 | 56 | 20/36 | 39/2 | 43 | 45 |
| 69 | 57 | 2/34 | 41/59 | 44 | 46 |
| 70 | 57 | 37/33 | 40/54 | 45 | 49 |
| 71 | 58 | 11/32 | 34/43 | 46 | 52 |
| 72 | 58 | 44/31 | 17/29 | 47 | 53 |
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| 74 | 59 | 45/28 | 56/50 | 49 | 57 |
| 75 | 60 | 14/27 | 46/26 | 50 | 58 |
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| 78 | 61 | 32/22 | 25/42 | 53 | 47 |
| 79 | 61 | 55/21 | 7/0 | 54 | 42 |
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| 83 | 63 | 8/13 | 16/34 | 57 | 40 |
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| 85 | 63 | 33/9 | 24/31 | 58 | 47 |
| 86 | 63 | 42/7 | 55/27 | 59 | 14 |
| 87 | 63 | 50/5 | 22/20 | 59 | 35 |
| 88 | 63 | 55/3 | 42/13 | 59 | 50 |
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| 7 | 6 | 20 | 29 | 54 | 17 | 3 | 3 |
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| 10 | 9 | 3 | 17 | 54 | 13 | 4 | 22 |
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| 12 | 10 | 51 | 40 | 54 | 10 | 5 | 16 |
| 13 | 11 | 45 | 50 | 54 | 6 | 5 | 42 |
| 14 | 12 | 39 | 56 | 54 | 3 | 6 | 9 |
| 15 | 13 | 33 | 59 | 54 | 0 | 6 | 37 |
| 16 | 14 | 27 | 59 | 53 | 57 | 7 | 5 |
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| 35 | 31 | 19 | 17 | 52 | 3 | 16 | 43 |
| 36 | 32 | 11 | 20 | 51 | 54 | 17 | 18 |
| 37 | 33 | 3 | 15 | 51 | 43 | 17 | 53 |
| 38 | 33 | 54 | 58 | 51 | 33 | 18 | 30 |
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| 41 | 36 | 29 | 1 | 50 | 56 | 20 | 21 |
| 42 | 37 | 19 | 57 | 50 | 42 | 20 | 59 |
| 43 | 38 | 10 | 39 | 50 | 28 | 21 | 38 |
| 44 | 39 | 1 | 7 | 50 | 14 | 22 | 18 |
| 45 | 39 | 51 | 21 | 49 | 57 | 22 | 59 |
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| 47 | 41 | 30 | 58 | 49 | 23 | 24 | 23 |
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| 49 | 43 | 9 | 25 | 48 | 44 | 25 | 40 |
| 50 | 43 | 58 | 9 | 48 | 23 | 26 | 34 |
| 51 | 44 | 46 | 32 | 48 | 2 | 27 | 21 |
| 52 | 45 | 34 | 34 | 47 | 38 | 28 | 8 |
| 53 | 46 | 22 | 12 | 47 | 12 | 28 | 55 |
| 54 | 47 | 9 | 24 | 46 | 47 | 29 | 41 |
| 55 | 47 | 56 | 11 | 46 | 20 | 30 | 36 |
| 56 | 48 | 42 | 31 | 45 | 50 | 31 | 26 |
| 57 | 49 | 28 | 21 | 45 | 18 | 32 | 17 |
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| 61 | 52 | 26 | 10 | 42 | 55 | 36 | 5[illegible] |
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| 67 | 56 | 32 | 20 | 38 | 3 | 41 | 56 |
| 68 | 57 | 10 | 23 | 37 | 4 | 42 | 59 |
| 69 | 57 | 47 | 27 | 36 | 2 | 44 | 3 |
| 70 | 58 | 23 | 29 | 34 | 57 | 45 | 6 |
| 71 | 58 | 48 | 26 | 33 | 44 | 46 | 9 |
| 72 | 59 | 22 | 10 | 32 | 30 | 47 | 15 |
| 73 | 60 | 4 | 40 | 31 | 13 | 48 | 18 |
| 74 | 60 | 35 | 53 | 29 | 51 | 49 | 22 |
| 75 | 61 | 5 | 44 | 28 | 22 | 50 | 23 |
| 76 | 61 | 34 | 6 | 26 | 51 | 51 | 26 |
| 77 | 62 | 0 | 57 | 24 | 15 | 52 | 27 |
| 78 | 62 | 26 | 12 | 23 | 37 | 53 | 24 |
| 79 | 62 | 49 | 49 | 21 | 40 | 54 | 19 |
| 80 | 63 | 11 | 39 | 20 | 1 | 55 | 12 |
| 81 | 63 | 31 | 40 | 18 | 7 | 56 | 1 |
| 82 | 63 | 49 | 47 | 16 | 9 | 56 | 51 |
| 83 | 64 | 5 | 56 | 14 | 10 | 57 | 34 |
| 84 | 64 | 20 | 6 | 12 | 5 | 58 | 10 |
| 85 | 64 | 32 | 11 | 9 | 58 | 58 | 43 |
| 86 | 64 | 52 | 9 | 7 | 48 | 59 | 9 |
| 87 | 64 | 49 | 57 | 5 | 35 | 59 | 30 |
| 88 | 64 | 55 | 32 | 3 | 22 | 59 | 46 |
| 89 | 64 | 58 | 54 | 1 | 6 | 59 | 55 |
| 90 | 65 | 0 | 0 | 0 | 0 | 60 | 0 |

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| 4 | 3 | 39 / 54 | 13 / 47 | 1 | 41 |
| 5 | 4 | 34 / 54 | 0 / 47 | 2 | 6 |
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| 7 | 6 | 23 / 54 | 32 / 44 | 2 | 56 |
| 8 | 7 | 18 / 54 | 26 / 42 | 3 | 21 |
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| 15 | 13 | 40 / 54 | 36 / 28 | 6 | 23 |
| 16 | 14 | 35 / 54 | 4 / 25 | 6 | 49 |
| 17 | 15 | 29 / 54 | 39 / 22 | 7 | 16 |
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| 19 | 17 | 18 / 54 | 10 / 15 | 8 | 10 |
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| 29 | 26 | 17 / 53 | 20 / 24 | 12 | 57 |
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| 41 | 36 | 49 / 51 | 22 / 34 | 19 | 38 |
| 42 | 37 | 40 / 51 | 46 / 21 | 20 | 16 |
| 43 | 38 | 33 / 51 | 17 / 8 | 20 | 54 |
| 44 | 39 | 23 / 50 | 35 / 55 | 21 | 35 |
| 45 | 40 | 14 / 50 | 20 / 38 | 22 | 13 |
| 46 | 41 | 4 / 50 | 48 / 23 | 22 | 54 |
| 47 | 41 | 54 / 50 | 21 / 6 | 23 | 35 |
| 48 | 42 | 44 / 49 | 27 / 48 | 24 | 18 |
| 49 | 43 | 34 / 49 | 14 / 29 | 25 | 1 |
| 50 | 44 | 24 / 49 | 44 / 9 | 25 | 45 |
| 51 | 45 | 13 / 48 | 43 / 49 | 26 | 30 |
| 52 | 46 | 3 / 48 | 42 / 24 | 27 | 16 |
| 53 | 46 | 51 / 48 | 7 / 2 | 28 | 4 |
| 54 | 47 | 39 / 47 | 9 / 38 | 28 | 52 |
| 55 | 48 | 29 / 47 | 47 / 10 | 29 | 41 |
| 56 | 49 | 15 / 46 | 57 / 41 | 30 | 31 |
| 57 | 50 | 0 / 46 | 38 / 13 | 31 | 24 |
| 58 | 50 | 46 / 45 | 41 / 39 | 32 | 16 |
| 59 | 51 | 33 / 45 | 30 / 6 | 33 | 10 |
| 60 | 52 | 17 / 44 | 36 / 31 | 34 | 5 |
| 61 | 53 | 2 / 43 | 7 / 53 | 35 | 2 |
| 62 | 53 | 46 / 43 | 0 / 10 | 35 | 48 |
| 63 | 54 | 29 / 42 | 10 / 27 | 36 | 48 |
| 64 | 55 | 11 / 41 | 37 / 44 | 37 | 48 |
| 65 | 55 | 53 / 40 | 21 / 53 | 38 | 49 |
| 66 | 56 | 34 / 40 | 14 / 2 | 40 | 2 |
| 67 | 57 | 14 / 39 | 16 / 7 | 41 | 5 |
| 68 | 57 | 53 / 38 | 33 / 7 | 42 | 8 |
| 69 | 58 | 31 / 37 | 30 / 5 | 43 | 13 |
| 70 | 59 | 8 / 36 | 35 / 0 | 44 | 19 |
| 71 | 59 | 44 / 34 | 35 / 50 | 45 | 25 |
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| 75 | 61 | 56 / 29 | 7 / 25 | 49 | 48 |
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| 78 | 63 | 19 / 24 | 37 / 31 | 52 | 57 |
| 79 | 63 | 44 / 22 | 8 / 43 | 53 | 56 |
| 80 | 64 | 6 / 20 | 41 / 40 | 54 | 54 |
| 81 | 64 | 27 / 18 | 41 / 47 | 55 | 48 |
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| 85 | 65 | 30 / 10 | 44 / 24 | 58 | 35 |
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| 3 | 2 | 45 / 55 | 41 / 13 | 1 12 | 33 | 30 | 5 / 53 | 20 / 28 | 14 29 | 63 | 55 | 6 / 43 | 8 / 27 | 36 3 |
| 4 | 3 | 40 / 55 | 54 / 12 | 1 36 | 34 | 30 | 48 / 53 | 48 / 21 | 15 0 | 64 | 55 | 49 / 42 | 34 / 44 | 37 4 |
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| 14 | 12 | 52 / 54 | 2 / 57 | 5 42 | 44 | 39 | 44 / 51 | 0 / 33 | 20 48 | 74 | 62 | 23 / 31 | 57 / 48 | 48 2 |
| 15 | 13 | 46 / 54 | 55 / 55 | 6 7 | 45 | 40 | 36 / 51 | 33 / 19 | 21 27 | 75 | 62 | 44 / 30 | 55 / 29 | 49 9 |
| 16 | 14 | 41 / 54 | 53 / 52 | 6 33 | 46 | 41 | 27 / 51 | 52 / 4 | 22 5 | 76 | 63 | 16 / 28 | 24 / 44 | 50 14 |
| 17 | 15 | 36 / 54 | 44 / 49 | 6 58 | 47 | 42 | 18 / 50 | 46 / 49 | 22 47 | 77 | 63 | 46 / 27 | 18 / 16 | 51 22 |
| 18 | 16 | 31 / 54 | 34 / 46 | 7 24 | 48 | 43 | 9 / 50 | 44 / 31 | 23 28 | 78 | 64 | 12 / 25 | 34 / 30 | 52 26 |
| 19 | 17 | 26 / 54 | 30 / 42 | 7 50 | 49 | 44 | 0 / 50 | 16 / 13 | 24 10 | 79 | 64 | 38 / 23 | 4 / 41 | 53 30 |
| 20 | 18 | 21 / 54 | 5 / 40 | 8 17 | 50 | 44 | 50 / 49 | 29 / 54 | 24 53 | 80 | 65 | 1 / 21 | 44 / 44 | 54 28 |
| 21 | 19 | 16 / 54 | 25 / 34 | 8 44 | 51 | 45 | 40 / 49 | 53 / 34 | 25 39 | 81 | 65 | 23 / 19 | 29 / 43 | 55 26 |
| 22 | 20 | 10 / 54 | 17 / 31 | 9 10 | 52 | 46 | 29 / 49 | 48 / 13 | 26 23 | 82 | 66 | 43 / 17 | 12 / 37 | 56 18 |
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| 25 | 22 | 53 / 54 | 37 / 17 | 10 33 | 55 | 48 | 56 / 48 | 28 / 0 | 28 46 | 85 | 66 | 29 / 10 | 39 / 44 | 58 31 |
| 26 | 23 | 47 / 54 | 44 / 14 | 11 1 | 56 | 49 | 44 / 47 | 28 / 34 | 29 36 | 86 | 66 | 40 / 8 | 53 / 34 | 59 3 |
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| 28 | 25 | 36 / 54 | 14 / 2 | 11 58 | 58 | 51 | 19 / 46 | 7 / 33 | 31 20 | 88 | 66 | 55 / 3 | 5 / 41 | 59 44 |
| 29 | 26 | 30 / 53 | 17 / 44 | 12 27 | 59 | 52 | 5 / 46 | 40 / 1 | 32 13 | 89 | 66 | 58 / 1 | 46 / 14 | 59 56 |
| 30 | 27 | 24 / 53 | 12 / 53 | 12 57 | 60 | 52 | 51 / 45 | 41 / 28 | 33 5 | 90 | 67 | 0 / 0 | 0 / 0 | 60 0 |

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| 11 | 10 | 11 | 55 | 24 | 28 | 4 | 16 |
| 12 | 11 | 6 | 55 | 52 | 27 | 4 | 40 |
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| 29 | 26 | 43 | 54 | 44 | 25 | 11 | 56 |
| 30 | 27 | 37 | 54 | 9 | 23 | 12 | 24 |
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| 33 | 30 | 19 | 54 | 48 | 0 | 13 | 54 |
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| 38 | 34 | 48 | 53 | 30 | 18 | 16 | 31 |
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| 56 | 50 | 14 | 48 | 4 | 26 | 28 | 41 |
| 57 | 51 | 2 | 47 | 34 | 57 | 29 | 29 |
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| 75 | 63 | 35 | 31 | 4 | 35 | 48 | 25 |
| 76 | 64 | 6 | 30 | 39 | 1 | 49 | 38 |
| 77 | 64 | 36 | 28 | 40 | 20 | 50 | 47 |
| 78 | 65 | 5 | 26 | 0 | 34 | 51 | 54 |
| 79 | 65 | 31 | 24 | 34 | 39 | 52 | 59 |
| 80 | 65 | 56 | 22 | 13 | 42 | 54 | 5 |
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| 82 | 66 | 59 | 18 | 30 | 21 | 56 | 2 |
| 83 | 66 | 57 | 16 | 57 | 12 | 56 | 54 |
| 84 | 67 | 14 | 13 | 9 | 51 | 57 | 39 |
| 85 | 67 | 28 | 11 | 0 | 26 | 58 | 20 |
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| 87 | 67 | 48 | 6 | 33 | 26 | 59 | 24 |
| 88 | 67 | 54 | 3 | 49 | 53 | 59 | 46 |
| 89 | 67 | 58 | 1 | 42 | 13 | 59 | 58 |
| 90 | 68 | 0 | 0 | 0 | 0 | 60 | 0 |

69.

| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 56<br>56 | 1<br>1 | 0 | 22 |
| 2 | 1 | 52<br>56 | 2<br>0 | 0 | 44 |
| 3 | 2 | 48<br>56 | 2<br>0 | 1 | 6 |
| 4 | 3 | 44<br>56 | 2<br>0 | 1 | 28 |
| 5 | 4 | 40<br>55 | 2<br>59 | 1 | 50 |
| 6 | 5 | 36<br>55 | 1<br>57 | 2 | 12 |
| 7 | 6 | 31<br>55 | 58<br>58 | 2 | 35 |
| 8 | 7 | 27<br>55 | 56<br>56 | 2 | 57 |
| 9 | 8 | 23<br>55 | 52<br>54 | 3 | 18 |
| 10 | 9 | 19<br>55 | 46<br>54 | 3 | 42 |
| 11 | 10 | 15<br>55 | 40<br>52 | 4 | 4 |
| 12 | 11 | 11<br>55 | 32<br>51 | 4 | 26 |
| 13 | 12 | 7<br>55 | 23<br>48 | 4 | 50 |
| 14 | 13 | 3<br>55 | 11<br>47 | 5 | 13 |
| 15 | 13 | 58<br>55 | 58<br>44 | 5 | 36 |
| 16 | 14 | 54<br>55 | 42<br>42 | 6 | 0 |
| 17 | 15 | 50<br>55 | 34<br>40 | 6 | 23 |
| 18 | 16 | 46<br>55 | 4<br>36 | 6 | 47 |
| 19 | 17 | 41<br>55 | 40<br>35 | 7 | 11 |
| 20 | 18 | 37<br>55 | 15<br>32 | 7 | 34 |
| 21 | 19 | 32<br>55 | 47<br>27 | 7 | 59 |
| 22 | 20 | 28<br>55 | 14<br>24 | 8 | 24 |
| 23 | 21 | 23<br>55 | 38<br>21 | 8 | 50 |
| 24 | 22 | 18<br>55 | 59<br>17 | 9 | 15 |
| 25 | 23 | 14<br>55 | 16<br>12 | 9 | 40 |
| 26 | 24 | 9<br>55 | 28<br>10 | 10 | 6 |
| 27 | 25 | 4<br>55 | 38<br>4 | 10 | 32 |
| 28 | 25 | 59<br>54 | 43<br>48 | 10 | 58 |
| 29 | 26 | 54<br>54 | 40<br>54 | 11 | 26 |
| 30 | 27 | 49<br>54 | 34<br>48 | 11 | 53 |
| 31 | 28 | 44<br>54 | 22<br>[illegible] | 12 | 21 |
| 32 | 29 | 39<br>54 | 5<br>37 | 12 | 50 |
| 33 | 30 | 33<br>54 | 42<br>30 | 13 | 18 |
| 34 | 31 | 28<br>54 | 12<br>23 | 13 | 41 |
| 35 | 32 | 22<br>54 | 35<br>51 | 14 | 18 |
| 36 | 33 | 16<br>54 | 43<br>8 | 14 | 48 |
| 37 | 34 | 11<br>54 | 0<br>1 | 15 | 9 |
| 38 | 35 | 5<br>53 | 1<br>51 | 15 | 49 |
| 39 | 35 | 58<br>53 | 52<br>44 | 16 | 22 |
| 40 | 36 | 52<br>53 | 36<br>34 | 16 | 55 |
| 41 | 37 | 46<br>53 | 10<br>23 | 17 | 28 |
| 42 | 38 | 39<br>53 | 33<br>13 | 18 | 5 |
| 43 | 39 | 32<br>53 | 46<br>3 | 18 | 38 |
| 44 | 40 | 21<br>52 | 49<br>49 | 19 | 13 |
| 45 | 41 | 18<br>52 | 38<br>37 | 19 | 50 |
| 46 | 42 | 11<br>52 | 15<br>25 | 20 | 28 |
| 47 | 43 | 3<br>52 | 40<br>17 | 21 | 6 |
| 48 | 43 | 55<br>51 | 50<br>44 | 21 | 45 |
| 49 | 44 | 47<br>51 | 44<br>40 | 22 | 26 |
| 50 | 45 | 39<br>51 | 24<br>22 | 23 | 7 |
| 51 | 46 | 30<br>51 | 46<br>4 | 23 | 49 |
| 52 | 47 | 21<br>50 | 50<br>46 | 24 | 32 |
| 53 | 48 | 12<br>50 | 36<br>29 | 25 | 17 |
| 54 | 49 | 3<br>50 | 0<br>4 | 26 | 3 |
| 55 | 49 | 53<br>49 | 4<br>41 | 26 | 50 |
| 56 | 50 | 42<br>49 | 49<br>15 | 27 | 38 |
| 57 | 51 | 31<br>48 | 59<br>48 | 28 | 28 |
| 58 | 52 | 20<br>48 | 47<br>22 | 29 | 21 |
| 59 | 53 | 9<br>47 | 9<br>51 | 30 | 13 |
| 60 | 53 | 57<br>47 | 0<br>19 | 31 | 7 |
| 61 | 54 | 44<br>46 | 19<br>45 | 32 | 3 |
| 62 | 55 | 31<br>46 | 4<br>9 | 33 | 0 |
| 63 | 56 | 17<br>45 | 13<br>28 | 33 | 58 |
| 64 | 57 | 2<br>44 | 41<br>46 | 34 | 59 |
| 65 | 57 | 47<br>44 | 27<br>3 | 36 | 2 |
| 66 | 58 | 31<br>43 | 30<br>13 | 37 | 5 |
| 67 | 59 | 14<br>42 | 43<br>22 | 38 | 11 |
| 68 | 59 | 57<br>41 | 5<br>26 | 39 | 18 |
| 69 | 60 | 38<br>40 | 31<br>27 | 40 | 27 |
| 70 | 61 | 18<br>39 | 58<br>21 | 41 | 36 |
| 71 | 61 | 58<br>38 | 19<br>15 | 42 | 41 |
| 72 | 62 | 36<br>3[illegible] | 34<br>59 | 43 | 57 |
| 73 | 63 | 13<br>35 | 33<br>40 | 45 | 10 |
| 74 | 63 | 49<br>34 | 13<br>16 | 46 | 25 |
| 75 | 64 | 23<br>32 | 29<br>48 | 47 | 40 |
| 76 | 64 | 56<br>31 | 17<br>10 | 48 | 52 |
| 77 | 65 | 27<br>29 | 27<br>27 | 50 | 4 |
| 78 | 65 | 56<br>27 | 54<br>39 | 51 | 18 |
| 79 | 66 | 24<br>25 | 33<br>45 | 52 | 28 |
| 80 | 66 | 50<br>23 | 18<br>42 | 53 | 34 |
| 81 | 67 | 14<br>21 | 0<br>32 | 54 | 38 |
| 82 | 67 | 37<br>19 | 32<br>19 | 55 | 41 |
| 83 | 67 | 54<br>16 | 51<br>57 | 56 | 36 |
| 84 | 68 | 11<br>14 | 48<br>32 | 57 | 29 |
| 85 | 68 | 26<br>12 | 20<br>1 | 58 | 14 |
| 86 | 68 | 38<br>9 | 21<br>26 | 58 | 51 |
| 87 | 68 | 47<br>6 | 47<br>48 | 59 | 20 |
| 88 | 68 | 54<br>4 | 31<br>5 | 59 | 41 |
| 89 | 68 | 18<br>1 | 40<br>20 | 59 | 54 |
| 90 | 69 | 0<br>0 | 0<br>0 | 60 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 56 | 56 | 33 | 23 | 0 | 21 |
| 2 | 1 | 52 | 56 | 46 | 22 | 0 | 42 |
| 3 | 2 | 49 | 56 | 8 | 22 | 1 | 3 |
| 4 | 3 | 45 | 56 | 30 | 22 | 1 | 24 |
| 5 | 4 | 41 | 56 | 52 | 21 | 1 | 49 |
| 6 | 5 | 38 | 56 | 13 | 20 | 2 | 6 |
| 7 | 6 | 34 | 56 | 33 | 20 | 2 | 28 |
| 8 | 7 | 30 | 56 | 53 | 17 | 2 | 48 |
| 9 | 8 | 27 | 56 | 10 | 18 | 3 | 11 |
| 10 | 9 | 33 | 56 | 28 | 16 | 3 | 32 |
| 11 | 10 | 19 | 56 | 44 | 15 | 3 | 53 |
| 12 | 11 | 15 | 56 | 58 | 14 | 4 | 16 |
| 13 | 12 | 12 | 56 | 13 | 14 | 4 | 37 |
| 14 | 13 | 8 | 56 | 24 | 10 | 4 | 59 |
| 15 | 14 | 4 | 56 | 34 | 8 | 5 | 21 |
| 16 | 15 | 0 | 56 | 42 | 5 | 5 | 43 |
| 17 | 15 | 56 | 56 | 47 | 4 | 6 | 6 |
| 18 | 16 | 52 | 56 | 51 | 0 | 6 | 28 |
| 19 | 17 | 48 | 55 | 50 | 58 | 6 | 51 |
| 20 | 18 | 44 | 55 | 49 | 57 | 7 | 15 |
| 21 | 19 | 40 | 55 | 46 | 52 | 7 | 38 |
| 22 | 20 | 36 | 55 | 38 | 50 | 8 | 2 |
| 23 | 21 | 32 | 55 | 28 | 46 | 8 | 21 |
| 24 | 22 | 28 | 55 | 14 | 42 | 8 | 49 |
| 25 | 23 | 23 | 55 | 16 | 38 | 9 | 14 |
| 26 | 24 | 19 | 55 | 34 | 36 | 9 | 40 |
| 27 | 25 | 15 | 55 | 10 | 30 | 10 | 4 |
| 28 | 26 | 10 | 55 | 40 | 26 | 10 | 29 |
| 29 | 27 | 6 | 55 | 6 | 21 | 10 | 55 |
| 30 | 28 | 1 | 55 | 27 | 16 | 11 | 21 |
| 31 | 28 | 56 | 55 | 43 | 12 | 11 | 49 |
| 32 | 29 | 51 | 55 | 55 | 5 | 12 | 15 |
| 33 | 30 | 47 | 54 | 0 | 59 | 12 | 43 |
| 34 | 31 | 41 | 54 | 59 | 54 | 13 | 11 |
| 35 | 32 | 36 | 54 | 53 | 47 | 13 | 33 |
| 36 | 33 | 31 | 54 | 40 | 38 | 14 | 8 |
| 37 | 34 | 26 | 54 | 19 | 31 | 14 | 37 |
| 38 | 35 | 20 | 54 | 50 | 24 | 14 | 8 |
| 39 | 36 | 15 | 54 | 14 | 17 | 14 | 43 |
| 40 | 37 | 9 | 54 | 3 | 7 | 16 | 11 |
| 41 | 38 | 3 | 53 | 58 | 57 | 16 | 43 |
| 42 | 38 | 57 | 53 | 35 | 49 | 17 | 16 |
| 43 | 39 | 51 | 53 | 24 | 38 | 17 | 50 |
| 44 | 40 | 45 | 53 | 2 | 26 | 18 | 24 |
| 45 | 41 | 38 | 53 | 28 | 14 | 19 | 0 |
| 46 | 42 | 31 | 53 | 43 | 3 | 19 | 36 |
| 47 | 43 | 24 | 52 | 46 | 49 | 20 | 13 |
| 48 | 44 | 27 | 52 | 34 | 34 | 20 | 51 |
| 49 | 44 | 10 | 52 | 10 | 21 | 21 | 31 |
| 50 | 46 | 2 | 52 | 51 | 4 | 22 | 10 |
| 51 | 46 | 44 | 51 | 34 | 47 | 22 | 52 |
| 52 | 47 | 46 | 51 | 22 | 31 | 23 | 34 |
| 53 | 48 | 37 | 51 | 53 | 10 | 24 | 18 |
| 54 | 49 | 27 | 50 | 3 | 51 | 24 | 4 |
| 55 | 50 | 19 | 50 | 44 | 29 | 25 | 50 |
| 56 | 51 | 10 | 50 | 23 | 4 | 26 | 37 |
| 57 | 52 | 0 | 49 | 27 | 41 | 27 | 26 |
| 58 | 52 | 40 | 49 | 8 | 14 | 28 | 16 |
| 59 | 53 | 39 | 48 | 22 | 44 | 29 | 8 |
| 60 | 54 | 28 | 48 | 7 | 14 | 30 | 2 |
| 61 | 55 | 16 | 47 | 21 | 43 | 30 | 58 |
| 62 | 56 | 4 | 47 | 4 | 7 | 31 | 54 |
| 63 | 56 | 51 | 46 | 11 | 29 | 32 | 53 |
| 64 | 57 | 37 | 45 | 40 | 49 | 33 | 54 |
| 65 | 58 | 23 | 45 | 29 | 6 | 34 | 57 |
| 66 | 59 | 8 | 44 | 35 | 19 | 36 | 0 |
| 67 | 59 | 52 | 43 | 54 | 29 | 37 | 6 |
| 68 | 60 | 36 | 42 | 33 | 35 | 38 | 13 |
| 69 | 61 | 18 | 41 | 58 | 36 | 39 | 21 |
| 70 | 62 | 0 | 40 | 34 | 32 | 40 | 33 |
| 71 | 62 | 41 | 39 | 6 | 25 | 41 | 46 |
| 72 | 63 | 20 | 38 | 31 | 12 | 42 | 59 |
| 73 | 63 | 58 | 36 | 43 | 55 | 44 | 15 |
| 74 | 64 | 35 | 35 | 38 | 31 | 45 | 31 |
| 75 | 65 | 11 | 34 | 9 | 0 | 46 | 46 |
| 76 | 65 | 45 | 32 | 9 | 22 | 48 | 3 |
| 77 | 66 | 17 | 30 | 31 | 41 | 49 | 23 |
| 78 | 66 | 48 | 28 | 12 | 49 | 50 | 37 |
| 79 | 67 | 27 | 26 | 1 | 51 | 51 | 50 |
| 80 | 67 | 43 | 24 | 52 | 46 | 53 | 2 |
| 81 | 68 | 8 | 22 | 38 | 35 | 54 | 13 |
| 82 | 68 | 31 | 20 | 13 | 14 | 55 | 29 |
| 83 | 68 | 51 | 17 | 27 | 50 | 56 | 20 |
| 84 | 69 | 9 | 15 | 17 | 17 | 57 | 14 |
| 85 | 69 | 44 | 12 | 34 | 38 | 58 | 1 |
| 86 | 69 | 37 | 9 | 12 | 55 | 58 | 43 |
| 87 | 69 | 47 | 7 | 7 | 9 | 59 | 16 |
| 88 | 69 | 54 | 4 | 16 | 18 | 59 | 40 |
| 89 | 69 | 58 | 1 | 34 | 26 | 59 | 53 |
| 90 | 70 | 0 | 0 | 0 | 0 | 60 | 0 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 56 / 56 | 44 / 44 | 0 | 20 | 31 | 29 | 8 / 55 | 32 / 38 | 11 | 15 | 61 | 55 | 47 / 44 | 19 / 39 | 29 | 49 |
| 2 | 1 | 52 / 56 | 28 / 43 | 0 | 39 | 32 | 30 | 4 / 55 | 10 / 33 | 11 | 40 | 62 | 56 | 34 / 44 | 58 / 6 | 30 | 45 |
| 3 | 2 | 50 / 56 | 11 / 43 | 1 | 0 | 33 | 30 | 59 / 55 | 43 / 27 | 12 | 6 | 63 | 57 | 24 / 47 | 4 / 30 | 31 | 43 |
| 4 | 3 | 46 / 56 | 54 / 43 | 1 | 20 | 34 | 31 | 55 / 55 | 10 / 22 | 12 | 33 | 64 | 58 | 11 / 46 | 34 / 52 | 32 | 43 |
| 5 | 4 | 43 / 56 | 37 / 42 | 1 | 40 | 35 | 32 | 50 / 55 | 32 / 16 | 13 | 1 | 65 | 58 | 58 / 46 | 26 / 9 | 33 | 44 |
| 6 | 5 | 40 / 56 | 19 / 42 | 2 | 0 | 36 | 33 | 45 / 55 | 48 / 8 | 13 | 28 | 66 | 59 | 44 / 45 | 35 / 25 | 34 | 50 |
| 7 | 6 | 37 / 56 | 1 / 40 | 2 | 20 | 37 | 34 | 40 / 55 | 50 / 2 | 13 | 58 | 67 | 60 | 30 / 44 | 0 / 36 | 35 | 55 |
| 8 | 7 | 33 / 56 | 41 / 40 | 2 | 40 | 38 | 35 | 35 / 54 | 58 / 55 | 14 | 27 | 68 | 61 | 14 / 43 | 36 / 43 | 37 | 4 |
| 9 | 8 | 30 / 56 | 21 / 39 | 3 | 1 | 39 | 36 | 30 / 54 | 57 / 45 | 14 | 54 | 69 | 61 | 58 / 42 | 19 / 47 | 38 | 15 |
| 10 | 9 | 27 / 56 | 0 / 37 | 3 | 21 | 40 | 37 | 25 / 54 | 42 / 39 | 15 | 26 | 70 | 62 | 41 / 41 | 6 / 46 | 39 | 25 |
| 11 | 10 | 23 / 56 | 37 / 37 | 3 | 42 | 41 | 38 | 20 / 54 | 21 / 30 | 15 | 57 | 71 | 63 | 22 / 40 | 52 / 38 | 40 | 38 |
| 12 | 11 | 20 / 56 | 14 / 36 | 4 | 2 | 42 | 39 | 14 / 54 | 51 / 23 | 16 | 30 | 72 | 64 | 3 / 39 | 30 / 28 | 41 | 57 |
| 13 | 12 | 16 / 56 | 40 / 33 | 4 | 23 | 43 | 40 | 9 / 54 | 14 / 12 | 17 | 1 | 73 | 64 | 42 / 38 | 58 / 11 | 43 | 13 |
| 14 | 13 | 13 / 56 | 3 / 32 | 4 | 44 | 44 | 41 | 3 / 54 | 26 / 2 | 17 | 35 | 74 | 65 | 21 / 36 | 9 / 46 | 44 | 30 |
| 15 | 14 | 9 / 56 | 55 / 30 | 5 | 5 | 45 | 41 | 57 / 53 | 28 / 51 | 18 | 8 | 75 | 65 | 57 / 35 | 55 / 17 | 45 | 49 |
| 16 | 15 | 6 / 56 | 25 / 28 | 5 | 26 | 46 | 42 | 51 / 53 | 19 / 40 | 18 | 44 | 76 | 66 | 33 / 33 | 12 / 42 | 47 | 12 |
| 17 | 16 | 2 / 56 | 43 / 26 | 5 | 47 | 47 | 43 | 44 / 53 | 59 / 27 | 19 | 19 | 77 | 67 | 6 / 31 | 54 / 55 | 48 | 29 |
| 18 | 18 | 59 / 56 | 19 / 23 | 6 | 9 | 48 | 44 | 38 / 53 | 26 / 15 | 19 | 56 | 78 | 67 | 38 / 30 | 49 / 2 | 49 | 49 |
| 19 | 17 | 55 / 56 | 42 / 22 | 6 | 31 | 49 | 45 | 31 / 53 | 41 / 0 | 20 | 34 | 79 | 68 | 8 / 28 | 51 / 3 | 51 | 10 |
| 20 | 18 | 52 / 56 | 4 / 20 | 6 | 52 | 50 | 46 | 24 / 52 | 41 / 46 | 21 | 13 | 80 | 68 | 36 / 24 | 54 / 57 | 52 | 28 |
| 21 | 19 | 48 / 56 | 34 / 16 | 7 | 15 | 51 | 47 | 17 / 52 | 27 / 30 | 21 | 53 | 81 | 69 | 2 / 23 | 51 / 47 | 53 | 41 |
| 22 | 20 | 44 / 56 | 40 / 13 | 7 | 37 | 52 | 48 | 9 / 52 | 57 / 15 | 22 | 35 | 82 | 69 | 26 / 21 | 32 / 15 | 54 | 50 |
| 23 | 21 | 40 / 56 | 3 / 10 | 8 | 0 | 53 | 49 | 2 / 51 | 11 / 56 | 23 | 16 | 83 | 69 | 47 / 18 | 47 / 44 | 55 | 58 |
| 24 | 22 | 37 / 56 | 3 / 7 | 8 | 23 | 54 | 49 | 54 / 51 | 7 / 37 | 24 | 0 | 84 | 70 | 6 / 15 | 31 / 4 | 56 | 58 |
| 25 | 23 | 33 / 56 | 10 / 4 | 8 | 46 | 55 | 50 | 45 / 51 | 44 / 16 | 24 | 45 | 85 | 70 | 22 / 13 | 35 / 20 | 57 | 52 |
| 26 | 24 | 29 / 56 | 14 / 0 | 9 | 10 | 56 | 51 | 37 / 50 | 0 / 53 | 25 | 31 | 86 | 70 | 35 / 10 | 55 / 28 | 58 | 37 |
| 27 | 25 | 25 / 55 | 14 / 55 | 9 | 34 | 57 | 52 | 27 / 50 | 53 / 31 | 26 | 19 | 87 | 70 | 46 / 7 | 33 / 33 | 59 | 13 |
| 28 | 26 | 21 / 55 | 9 / 52 | 9 | 59 | 58 | 53 | 18 / 50 | 34 / 6 | 27 | 10 | 88 | 70 | 53 / 4 | 56 / 31 | 59 | 38 |
| 29 | 27 | 17 / 55 | 1 / 47 | 10 | 24 | 59 | 54 | 8 / 49 | 30 / 39 | 28 | 1 | 89 | 70 | 58 / 1 | 27 / 33 | 59 | 56 |
| 30 | 28 | 12 / 55 | 48 / 44 | 10 | 49 | 60 | 54 | 58 / 49 | 9 / 10 | 28 | 54 | 90 | 71 | 0 / 0 | 0 / 0 | 60 | 0 |

| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 57 / 57 | 4 / 43 | 0 | 19 |
| 2 | 1 | 54 / 57 | 7 / 4 | 0 | 38 |
| 3 | 2 | 51 / 57 | 11 / 3 | 0 | 57 |
| 4 | 3 | 48 / 57 | 14 / 3 | 1 | 16 |
| 5 | 4 | 44 / 57 | 17 / 2 | 1 | 35 |
| 6 | 5 | 42 / 57 | 19 / 2 | 1 | 54 |
| 7 | 6 | 39 / 57 | 21 / 1 | 2 | 13 |
| 8 | 7 | 36 / 57 | 22 / 0 | 2 | 32 |
| 9 | 8 | 33 / 56 | 22 / 59 | 2 | 51 |
| 10 | 9 | 30 / 56 | 21 / 58 | 3 | 11 |
| 11 | 10 | 27 / 56 | 19 / 57 | 3 | 30 |
| 12 | 11 | 24 / 56 | 16 / 57 | 3 | 49 |
| 13 | 12 | 21 / 56 | 13 / 54 | 4 | 8 |
| 14 | 13 | 18 / 56 | 7 / 53 | 4 | 27 |
| 15 | 14 | 14 / 56 | 0 / 51 | 4 | 46 |
| 16 | 15 | 11 / 56 | 51 / 49 | 5 | 9 |
| 17 | 16 | 8 / 56 | 40 / 48 | 5 | 30 |
| 18 | 17 | 5 / 56 | 28 / 45 | 5 | 40 |
| 19 | 18 | 2 / 56 | 23 / 43 | 6 | 11 |
| 20 | 18 | 58 / 56 | 46 / 43 | 6 | 53 |
| 21 | 19 | 54 / 56 | 39 / 38 | 6 | 44 |
| 22 | 20 | 52 / 56 | 17 / 36 | 7 | 14 |
| 23 | 21 | 48 / 56 | 45 / 33 | 7 | 49 |
| 24 | 22 | 44 / 56 | 26 / 30 | 7 | 47 |
| 25 | 23 | 41 / 56 | 46 / 28 | 8 | 42 |
| 26 | 24 | 38 / 56 | 42 / 24 | 8 | [illegible] |
| 27 | 24 | 34 / 56 | 48 / 20 | 9 | [illegible] |
| 28 | 25 | 31 / 56 | 8 / 17 | 9 | [illegible] |
| 29 | 27 | 27 / 56 | 54 / 12 | 9 | [illegible] |
| 30 | 28 | 23 / 56 | 57 / 10 | 10 | 16 |
| 31 | 29 | 19 / 56 | 47 / 3 | 10 | 39 |
| 32 | 30 | 14 / 55 | 40 / 49 | 11 | 5 |
| 33 | 31 | 11 / 55 | 49 / 48 | 11 | 30 |
| 34 | 32 | 7 / 55 | 43 / 40 | 11 | 46 |
| 35 | 33 | 3 / 55 | 33 / 43 | 12 | 22 |
| 36 | 33 | 59 / 55 | 16 / 38 | 12 | 49 |
| 37 | 34 | 54 / 55 | 54 / 31 | 13 | 14 |
| 38 | 35 | 50 / 55 | 24 / 26 | 13 | 43 |
| 39 | 36 | 44 / 55 | 41 / 17 | 14 | 11 |
| 40 | 37 | 41 / 55 | 8 / 10 | 14 | 41 |
| 41 | 38 | 36 / 55 | 18 / 5 | 15 | 10 |
| 42 | 39 | 31 / 54 | 21 / 49 | 15 | 41 |
| 43 | 40 | 26 / 54 | 14 / 26 | 16 | 12 |
| 44 | 41 | 21 / 54 | 1 / 34 | 16 | 43 |
| 45 | 42 | 14 / 54 | 36 / 27 | 17 | 18 |
| 46 | 43 | 10 / 54 | 3 / 14 | 17 | 40 |
| 47 | 44 | 4 / 54 | 18 / 4 | 18 | 24 |
| 48 | 44 | 58 / 53 | 22 / 43 | 19 | 1 |
| 49 | 45 | 52 / 53 | 14 / 39 | 19 | 37 |
| 50 | 46 | 44 / 53 | 42 / 26 | 20 | 14 |
| 51 | 47 | 39 / 53 | 20 / 12 | 20 | 49 |
| 52 | 48 | 32 / 52 | 22 / 44 | 21 | 33 |
| 53 | 49 | 27 / 52 | 27 / 40 | 22 | 14 |
| 54 | 50 | 18 / 52 | 7 / 22 | 22 | 46 |
| 55 | 51 | 10 / 52 | 29 / 2 | 23 | 40 |
| 56 | 52 | 2 / 51 | 31 / 42 | 24 | 24 |
| 57 | 52 | 54 / 51 | 13 / 21 | 25 | 12 |
| 58 | 53 | 44 / 50 | 34 / 47 | 26 | 1 |
| 59 | 54 | 36 / 50 | 31 / 32 | 26 | 41 |
| 60 | 55 | 27 / 49 | 3 / 4 | 27 | 43 |
| 61 | 56 | 17 / 49 | 8 / 51 | 28 | 36 |
| 62 | 57 | 6 / 49 | 43 / 4 | 29 | 32 |
| 63 | 57 | 54 / 48 | 47 / 30 | 30 | 30 |
| 64 | 58 | 44 / 47 | 17 / 43 | 31 | 29 |
| 65 | 59 | 32 / 47 | 10 / 41 | 32 | 30 |
| 66 | 60 | 19 / 46 | 24 / 30 | 33 | 33 |
| 67 | 61 | 5 / 45 | 44 / 45 | 34 | 40 |
| 68 | 61 | 51 / 44 | 40 / 40 | 35 | 49 |
| 69 | 62 | 36 / 43 | 38 / 47 | 36 | 49 |
| 70 | 63 | 20 / 42 | 31 / 49 | 38 | 12 |
| 71 | 64 | 5 / 41 | 30 / 47 | 39 | 28 |
| 72 | 64 | 44 / 40 | 27 / 44 | 40 | 44 |
| 73 | 65 | 26 / 39 | 11 / 28 | 42 | 4 |
| 74 | 66 | 5 / 38 | 39 / 4 | 43 | 26 |
| 75 | 66 | 43 / 36 | 22 / 40 | 44 | 40 |
| 76 | 67 | 20 / 34 | 24 / 49 | 46 | 10 |
| 77 | 67 | 44 / 33 | 23 / 14 | 47 | 34 |
| 78 | 68 | 58 / 31 | 38 / 23 | 49 | 2 |
| 79 | 69 | 0 / 29 | 1 / 21 | 50 | 24 |
| 80 | 69 | 29 / 27 | 22 / 10 | 51 | 44 |
| 81 | 69 | 46 / 24 | 32 / 40 | 53 | 3 |
| 82 | 70 | 21 / 22 | 22 / 23 | 54 | 23 |
| 83 | 70 | 43 / 19 | 44 / 44 | 55 | 33 |
| 84 | 71 | 3 / 16 | 29 / 48 | 56 | 37 |
| 85 | 71 | 20 / 14 | 27 / 4 | 57 | 36 |
| 86 | 71 | 34 / 11 | 32 / 4 | 58 | 26 |
| 87 | 71 | 44 / 7 | 36 / 48 | 59 | 6 |
| 88 | 71 | 43 / 4 | 34 / 49 | 59 | 36 |
| 89 | 71 | 48 / 1 | 33 / 37 | 59 | 53 |
| 90 | 72 | 0 / 0 | 0 / 0 | 60 | 0 |

73

| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 57<br>57 | 33<br>22 | 0 | 18 |
| 2 | 1 | 54<br>57 | 45<br>23 | 0 | 36 |
| 3 | 2 | 52<br>57 | 8<br>22 | 0 | 53 |
| 4 | 3 | 49<br>57 | 30<br>22 | 1 | 11 |
| 5 | 4 | 46<br>57 | 52<br>21 | 1 | 29 |
| 6 | 5 | 44<br>57 | 13<br>21 | 1 | 47 |
| 7 | 6 | 41<br>57 | 34<br>20 | 2 | 5 |
| 8 | 7 | 38<br>57 | 54<br>19 | 2 | 23 |
| 9 | 8 | 36<br>57 | 13<br>19 | 2 | 42 |
| 10 | 9 | 33<br>57 | 32<br>17 | 3 | 0 |
| 11 | 10 | 30<br>57 | 49<br>17 | 3 | 19 |
| 12 | 11 | 28<br>57 | 6<br>16 | 3 | 36 |
| 13 | 12 | 25<br>57 | 22<br>14 | 3 | 55 |
| 14 | 13 | 22<br>57 | 36<br>13 | 4 | 14 |
| 15 | 14 | 19<br>57 | 49<br>11 | 4 | 33 |
| 16 | 15 | 17<br>57 | 0<br>10 | 4 | 53 |
| 17 | 16 | 14<br>57 | 10<br>8 | 5 | 11 |
| 18 | 17 | 11<br>57 | 18<br>6 | 5 | 31 |
| 19 | 18 | 8<br>57 | 24<br>5 | 5 | 51 |
| 20 | 19 | 5<br>57 | 29<br>3 | 6 | 11 |
| 21 | 20 | 2<br>56 | 32<br>59 | 6 | 29 |
| 22 | 20 | 59<br>56 | 31<br>57 | 6 | 51 |
| 23 | 21 | 56<br>56 | 28<br>55 | 7 | 12 |
| 24 | 22 | 53<br>56 | 33<br>54 | 7 | 32 |
| 25 | 23 | 50<br>56 | 17<br>50 | 7 | 52 |
| 26 | 24 | 47<br>56 | 7<br>47 | 8 | 14 |
| 27 | 25 | 43<br>56 | 54<br>43 | 8 | 35 |
| 28 | 26 | 40<br>56 | 37<br>40 | 8 | 57 |
| 29 | 27 | 37<br>56 | 17<br>36 | 9 | 19 |
| 30 | 28 | 33<br>56 | 53<br>33 | 9 | 42 |
| 31 | 29 | 30<br>56 | 26<br>29 | 10 | 6 |
| 32 | 30 | 26<br>56 | 55<br>24 | 10 | 29 |
| 33 | 31 | 23<br>56 | 19<br>20 | 10 | 53 |
| 34 | 32 | 19<br>56 | 39<br>16 | 11 | 17 |
| 35 | 33 | 15<br>56 | 55<br>10 | 11 | 42 |
| 36 | 34 | 12<br>56 | 5<br>4 | 12 | 7 |
| 37 | 35 | 8<br>55 | 9<br>59 | 12 | 33 |
| 38 | 36 | 4<br>55 | 8<br>54 | 13 | 1 |
| 39 | 37 | 0<br>55 | 2<br>47 | 13 | 27 |
| 40 | 37 | 55<br>55 | 49<br>39 | 13 | 54 |
| 41 | 38 | 51<br>55 | 28<br>34 | 14 | 23 |
| 42 | 39 | 47<br>55 | 2<br>25 | 14 | 52 |
| 43 | 40 | 42<br>55 | 27<br>17 | 15 | 22 |
| 44 | 41 | 37<br>55 | 44<br>10 | 15 | 52 |
| 45 | 42 | 32<br>54 | 54<br>59 | 16 | 23 |
| 46 | 43 | 27<br>54 | 53<br>50 | 16 | 56 |
| 47 | 44 | 22<br>54 | 43<br>40 | 17 | 29 |
| 48 | 45 | 17<br>54 | 33<br>29 | 18 | 3 |
| 49 | 46 | 11<br>54 | 52<br>17 | 18 | 38 |
| 50 | 47 | 6<br>54 | 9<br>5 | 19 | 14 |
| 51 | 48 | 0<br>53 | 14<br>51 | 19 | 51 |
| 52 | 48 | 54<br>53 | 5<br>36 | 20 | 30 |
| 53 | 49 | 47<br>53 | 41<br>22 | 21 | 9 |
| 54 | 50 | 41<br>53 | 3<br>6 | 21 | 52 |
| 55 | 51 | 34<br>52 | 9<br>47 | 22 | 33 |
| 56 | 52 | 26<br>52 | 56<br>29 | 23 | 18 |
| 57 | 53 | 19<br>52 | 42<br>9 | 24 | 4 |
| 58 | 54 | 11<br>51 | 34<br>48 | 24 | 49 |
| 59 | 55 | 3<br>51 | 22<br>24 | 25 | 38 |
| 60 | 55 | 54<br>50 | 46<br>58 | 26 | 27 |
| 61 | 56 | 45<br>50 | 44<br>31 | 27 | 21 |
| 62 | 57 | 36<br>50 | 15<br>2 | 28 | 17 |
| 63 | 58 | 26<br>49 | 17<br>29 | 29 | 12 |
| 64 | 59 | 15<br>48 | 46<br>54 | 30 | 10 |
| 65 | 60 | 4<br>48 | 40<br>18 | 31 | 13 |
| 66 | 60 | 52<br>47 | 48<br>37 | 32 | 17 |
| 67 | 61 | 40<br>46 | 35<br>54 | 33 | 22 |
| 68 | 62 | 27<br>46 | 29<br>4 | 34 | 30 |
| 69 | 63 | 13<br>44 | 33<br>10 | 35 | 40 |
| 70 | 63 | 48<br>44 | 43<br>15 | 36 | 55 |
| 71 | 64 | 42<br>43 | 48<br>13 | 38 | 11 |
| 72 | 65 | 26<br>42 | 11<br>4 | 39 | 28 |
| 73 | 66 | 8<br>40 | 15<br>50 | 40 | 50 |
| 74 | 67 | 49<br>39 | 5<br>59 | 42 | 13 |
| 75 | 67 | 48<br>38 | 34<br>0 | 43 | 38 |
| 76 | 68 | 6<br>36 | 34<br>25 | 45 | 6 |
| 77 | 68 | 42<br>34 | 57<br>43 | 46 | 36 |
| 78 | 69 | 17<br>33 | 40<br>45 | 48 | 0 |
| 79 | 69 | 50<br>30 | 25<br>42 | 49 | 31 |
| 80 | 70 | 21<br>28 | 7<br>28 | 50 | 59 |
| 81 | 70 | 49<br>26 | 35<br>10 | 52 | 26 |
| 82 | 71 | 46<br>23 | 45<br>33 | 53 | 45 |
| 83 | 71 | 39<br>20 | 18<br>48 | 55 | 1 |
| 84 | 72 | 0<br>17 | 6<br>57 | 56 | 15 |
| 85 | 72 | 18<br>14 | 3<br>55 | 57 | 21 |
| 86 | 72 | 32<br>11 | 58<br>44 | 58 | 15 |
| 87 | 72 | 44<br>8 | 42<br>26 | 59 | 1 |
| 88 | 72 | 53<br>5 | 10<br>6 | 59 | 34 |
| 89 | 72 | 58<br>0 | 16<br>44 | 59 | 54 |
| 90 | 72 | 0<br>0 | 0<br>0 | 60 | 0 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 57 / 57 | 41 / 40 | 0 | 16 | 31 | 29 | 40 / 56 | 32 / 52 | 9 | 30 | 61 | 57 | 13 / 51 | 9 / 27 | 26 | 4 |
| 2 | 1 | 55 / 57 | 21 / 40 | 0 | 34 | 32 | 30 | 37 / 56 | 34 / 48 | 9 | 53 | 62 | 58 | 4 / 50 | 32 / 57 | 26 | 56 |
| 3 | 2 | 53 / 57 | 1 / 40 | 0 | 51 | 33 | 31 | 34 / 56 | 12 / 44 | 10 | 14 | 63 | 58 | 55 / 50 | 29 / 27 | 27 | 52 |
| 4 | 3 | 50 / 57 | 41 / 40 | 1 | 8 | 34 | 32 | 30 / 56 | 56 / 41 | 10 | 39 | 64 | 59 | 45 / 49 | 56 / 57 | 28 | 50 |
| 5 | 4 | 48 / 57 | 21 / 39 | 1 | 24 | 35 | 33 | 27 / 56 | 37 / 37 | 11 | 2 | 65 | 60 | 35 / 49 | 53 / 22 | 29 | 51 |
| 6 | 5 | 46 / 57 | 0 / 39 | 1 | 41 | 36 | 34 | 24 / 56 | 12 / 30 | 11 | 26 | 66 | 61 | 25 / 48 | 15 / 42 | 30 | 52 |
| 7 | 6 | 43 / 57 | 39 / 38 | 1 | 58 | 37 | 35 | 20 / 56 | 42 / 27 | 11 | 51 | 67 | 62 | 13 / 48 | 57 / 2 | 31 | 58 |
| 8 | 7 | 41 / 57 | 17 / 38 | 2 | 15 | 38 | 36 | 17 / 56 | 9 / 20 | 12 | 16 | 68 | 63 | 1 / 47 | 59 / 14 | 33 | 5 |
| 9 | 8 | 38 / 57 | 55 / 37 | 2 | 32 | 39 | 37 | 13 / 56 | 29 / 14 | 12 | 41 | 69 | 63 | 49 / 46 | 13 / 25 | 34 | 16 |
| 10 | 9 | 36 / 57 | 33 / 36 | 2 | 49 | 40 | 38 | 9 / 56 | 43 / 8 | 13 | 7 | 70 | 64 | 35 / 45 | 38 / 31 | 35 | 31 |
| 11 | 10 | 34 / 57 | 8 / 34 | 3 | 7 | 41 | 39 | 5 / 56 | 51 / 3 | 13 | 35 | 71 | 65 | 21 / 44 | 9 / 30 | 36 | 46 |
| 12 | 10 | 31 / 57 | 43 / 34 | 3 | 25 | 42 | 40 | 1 / 55 | 54 / 55 | 14 | 2 | 72 | 66 | 5 / 43 | 39 / 26 | 38 | 5 |
| 13 | 12 | 29 / 57 | 16 / 34 | 3 | 44 | 43 | 40 | 57 / 55 | 49 / 47 | 14 | 30 | 73 | 66 | 49 / 42 | 5 / 13 | 39 | 25 |
| 14 | 13 | 26 / 57 | 40 / 32 | 4 | 0 | 44 | 41 | 53 / 55 | 36 / 41 | 15 | 0 | 74 | 67 | 31 / 40 | 18 / 54 | 40 | 44 |
| 15 | 14 | 24 / 57 | 22 / 31 | 4 | 17 | 45 | 42 | 49 / 55 | 17 / 32 | 15 | 30 | 75 | 68 | 12 / 39 | 12 / 23 | 42 | 23 |
| 16 | 14 | 21 / 57 | 53 / 28 | 4 | 35 | 46 | 43 | 44 / 55 | 49 / 23 | 16 | 0 | 76 | 68 | 51 / 37 | 40 / 53 | 43 | 42 |
| 17 | 16 | 19 / 57 | 21 / 28 | 4 | 54 | 47 | 44 | 40 / 55 | 12 / 14 | 16 | 31 | 77 | 69 | 29 / 36 | 33 / 7 | 45 | 24 |
| 18 | 17 | 16 / 57 | 49 / 25 | 5 | 11 | 48 | 45 | 35 / 55 | 26 / 4 | 17 | 4 | 78 | 70 | 5 / 34 | 40 / 16 | 46 | 58 |
| 19 | 18 | 14 / 57 | 14 / 25 | 5 | 29 | 49 | 46 | 30 / 54 | 30 / 53 | 17 | 37 | 79 | 70 | 39 / 32 | 56 / 10 | 48 | 31 |
| 20 | 19 | 11 / 57 | 40 / 21 | 5 | 48 | 50 | 47 | 25 / 54 | 23 / 42 | 18 | 12 | 80 | 71 | 12 / 29 | 6 / 55 | 50 | 4 |
| 21 | 20 | 9 / 57 | 1 / 21 | 6 | 8 | 51 | 48 | 20 / 54 | 5 / 30 | 18 | 49 | 81 | 71 | 43 / 27 | 1 / 29 | 51 | 37 |
| 22 | 21 | 6 / 57 | 22 / 18 | 6 | 26 | 52 | 49 | 14 / 54 | 35 / 15 | 19 | 24 | 82 | 72 | 9 / 24 | 30 / 49 | 53 | 8 |
| 23 | 22 | 3 / 57 | 40 / 15 | 6 | 46 | 53 | 50 | 8 / 54 | 40 / 5 | 20 | 3 | 83 | 72 | 34 / 22 | 19 / 2 | 54 | 34 |
| 24 | 23 | 0 / 57 | 55 / 14 | 7 | 6 | 54 | 51 | 2 / 53 | 55 / 47 | 20 | 42 | 84 | 72 | 56 / 19 | 21 / 3 | 55 | 52 |
| 25 | 24 | 58 / 57 | 9 / 12 | 7 | 25 | 55 | 51 | 56 / 53 | 42 / 33 | 21 | 23 | 85 | 73 | 14 / 14 | 24 / 49 | 57 | 0 |
| 26 | 25 | 55 / 57 | 20 / 8 | 7 | 45 | 56 | 52 | 50 / 53 | 14 / 15 | 22 | 6 | 86 | 73 | 31 / 12 | 13 / 30 | 58 | 2 |
| 27 | 26 | 52 / 57 | 29 / 5 | 8 | 6 | 57 | 53 | 43 / 52 | 29 / 55 | 22 | 49 | 87 | 73 | 43 / 9 | 43 / 1 | 58 | 40 |
| 28 | 26 | 49 / 57 | 34 / 2 | 8 | 27 | 58 | 54 | 36 / 52 | 24 / 36 | 23 | 36 | 88 | 73 | 52 / 5 | 44 / 26 | 59 | 28 |
| 29 | 27 | 46 / 56 | 36 / 59 | 8 | 48 | 59 | 55 | 29 / 52 | 0 / 13 | 24 | 24 | 89 | 73 | 58 / 1 | 20 / 50 | 59 | 53 |
| 30 | 28 | 43 / 56 | 35 / 57 | 9 | 9 | 60 | 56 | 21 / 51 | 13 / 52 | 25 | 13 | 90 | 74 | 0 / 0 | 0 / 0 | 60 | 0 |

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| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 57 / 57 | 57 / 58 | 0 | 16 |
| 2 | 1 | 55 / 57 | 55 / 57 | 0 | 31 |
| 3 | 2 | 53 / 57 | 52 / 57 | 0 | 47 |
| 4 | 3 | 51 / 57 | 49 / 56 | 1 | 3 |
| 5 | 4 | 49 / 57 | 45 / 56 | 1 | 19 |
| 6 | 5 | 47 / 57 | 41 / 56 | 1 | 35 |
| 7 | 6 | 45 / 57 | 37 / 55 | 1 | 51 |
| 8 | 7 | 43 / 57 | 33 / 55 | 2 | 7 |
| 9 | 8 | 41 / 57 | 27 / 54 | 2 | 22 |
| 10 | 9 | 39 / 57 | 21 / 54 | 2 | 39 |
| 11 | 10 | 37 / 57 | 15 / 52 | 2 | 55 |
| 12 | 11 | 35 / 57 | 7 / 53 | 3 | 11 |
| 13 | 12 | 33 / 57 | 0 / 50 | 3 | 27 |
| 14 | 13 | 30 / 57 | 50 / 49 | 3 | 44 |
| 15 | 14 | 28 / 57 | 39 / 49 | 4 | 1 |
| 16 | 15 | 26 / 57 | 28 / 47 | 4 | 17 |
| 17 | 16 | 24 / 57 | 15 / 45 | 4 | 34 |
| 18 | 17 | 22 / 57 | 0 / 44 | 4 | 52 |
| 19 | 18 | 19 / 57 | 44 / 44 | 5 | 9 |
| 20 | 19 | 17 / 57 | 28 / 41 | 5 | 27 |
| 21 | 20 | 14 / 57 | 9 / 39 | 5 | 44 |
| 22 | 21 | 12 / 57 | 48 / 38 | 6 | 3 |
| 23 | 22 | 10 / 57 | 26 / 35 | 6 | 20 |
| 24 | 23 | 8 / 57 | 1 / 33 | 6 | 39 |
| 25 | 24 | 5 / 57 | 34 / 32 | 6 | 57 |
| 26 | 25 | 3 / 57 | 6 / 29 | 7 | 16 |
| 27 | 26 | 0 / 57 | 35 / 26 | 7 | 35 |
| 28 | 26 | 58 / 57 | 1 / 23 | 7 | 55 |
| 29 | 27 | 55 / 57 | 24 / 20 | 8 | 14 |
| 30 | 28 | 52 / 57 | 44 / 18 | 8 | 36 |
| 31 | 29 | 50 / 57 | 2 / 15 | 8 | 56 |
| 32 | 30 | 47 / 57 | 17 / 10 | 9 | 16 |
| 33 | 31 | 44 / 57 | 27 / 8 | 9 | 38 |
| 34 | 32 | 41 / 57 | 35 / 4 | 10 | 0 |
| 35 | 33 | 38 / 56 | 39 / 59 | 10 | 21 |
| 36 | 34 | 35 / 56 | 38 / 55 | 10 | 44 |
| 37 | 35 | 32 / 56 | 33 / 52 | 11 | 7 |
| 38 | 36 | 29 / 56 | 25 / 45 | 11 | 31 |
| 39 | 37 | 26 / 56 | 10 / 40 | 11 | 55 |
| 40 | 38 | 22 / 56 | 40 / 36 | 12 | 21 |
| 41 | 39 | 19 / 56 | 26 / 30 | 12 | 46 |
| 42 | 40 | 15 / 56 | 46 / 23 | 13 | 12 |
| 43 | 41 | 12 / 56 | 19 / 17 | 13 | 38 |
| 44 | 42 | 8 / 56 | 36 / 11 | 14 | 5 |
| 45 | 43 | 4 / 56 | 47 / 2 | 14 | 34 |
| 46 | 44 | 0 / 55 | 49 / 54 | 15 | 3 |
| 47 | 45 | 56 / 55 | 43 / 47 | 15 | 34 |
| 48 | 45 | 52 / 55 | 30 / 37 | 16 | 5 |
| 49 | 46 | 48 / 55 | 7 / 28 | 16 | 36 |
| 50 | 47 | 43 / 55 | 35 / 19 | 17 | 9 |
| 51 | 48 | 38 / 55 | 42 / 5 | 17 | 42 |
| 52 | 49 | 33 / 54 | 49 / 54 | 18 | 19 |
| 53 | 50 | 28 / 54 | 43 / 44 | 18 | 46 |
| 54 | 51 | 23 / 54 | 37 / 28 | 19 | 33 |
| 55 | 52 | 18 / 54 | 4 / 14 | 20 | 12 |
| 56 | 53 | 12 / 53 | 20 / 28 | 20 | 43 |
| 57 | 54 | 6 / 53 | 18 / 22 | 21 | 34 |
| 58 | 55 | 0 / 53 | 0 / 22 | 22 | 19 |
| 59 | 55 | 53 / 53 | 24 / 2 | 23 | 4 |
| 60 | 56 | 46 / 52 | 26 / 47 | 23 | 52 |
| 61 | 57 | 39 / 52 | 9 / 49 | 24 | 41 |
| 62 | 58 | 31 / 51 | 28 / 49 | 25 | 33 |
| 63 | 59 | 33 / 51 | 21 / 24 | 26 | 28 |
| 64 | 60 | 14 / 50 | 46 / 48 | 27 | 26 |
| 65 | 61 | 5 / 50 | 44 / 23 | 28 | 22 |
| 66 | 61 | 56 / 49 | 7 / 48 | 29 | 25 |
| 67 | 62 | 44 / 49 | 55 / 9 | 30 | 29 |
| 68 | 63 | 35 / 48 | 4 / 24 | 31 | 35 |
| 69 | 64 | 33 / 47 | 29 / 40 | 32 | 48 |
| 70 | 65 | 11 / 46 | 9 / 46 | 34 | 0 |
| 71 | 65 | 57 / 44 | 55 / 49 | 35 | 17 |
| 72 | 66 | 43 / 44 | 44 / 40 | 36 | 40 |
| 73 | 67 | 28 / 43 | 34 / 38 | 38 | 0 |
| 74 | 68 | 12 / 42 | 12 / 23 | 39 | 28 |
| 75 | 68 | 44 / 40 | 34 / 57 | 40 | 57 |
| 76 | 69 | 35 / 39 | 32 / 24 | 42 | 30 |
| 77 | 70 | 14 / 37 | 57 / 39 | 44 | 5 |
| 78 | 70 | 52 / 34 | 36 / 51 | 45 | 44 |
| 79 | 71 | 28 / 33 | 27 / 43 | 47 | 22 |
| 80 | 72 | 2 / 31 | 20 / 28 | 49 | 2 |
| 81 | 72 | 33 / 29 | 38 / 0 | 50 | 42 |
| 82 | 73 | 2 / 26 | 38 / 16 | 52 | 17 |
| 83 | 73 | 28 / 23 | 54 / 19 | 53 | 49 |
| 84 | 74 | 52 / 20 | 13 / 11 | 55 | 19 |
| 85 | 74 | 12 / 16 | 24 / 51 | 56 | 39 |
| 86 | 74 | 29 / 13 | 14 / 18 | 57 | 48 |
| 87 | 74 | 42 / 9 | 33 / 39 | 58 | 46 |
| 88 | 74 | 52 / 4 | 12 / 51 | 59 | 27 |
| 89 | 74 | 58 / 1 | 3 / 17 | 59 | 52 |
| 90 | 75 | 0 / 0 | 0 / 0 | 60 | 0 |

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|---|---|---|---|---|---|
| 1 | 0 | 58 / 58 | 15 / 13 | 0 | 15 |
| 2 | 1 | 56 / 58 | 26 / 13 | 0 | 30 |
| 3 | 2 | 54 / 58 | 39 / 13 | 0 | 44 |
| 4 | 3 | 52 / 58 | 52 / 12 | 0 | 58 |
| 5 | 4 | 51 / 58 | 4 / 12 | 1 | 13 |
| 6 | 5 | 49 / 58 | 16 / 12 | 1 | 28 |
| 7 | 6 | 47 / 58 | 28 / 11 | 1 | 43 |
| 8 | 7 | 45 / 58 | 39 / 10 | 1 | 58 |
| 9 | 8 | 43 / 58 | 49 / 11 | 2 | 14 |
| 10 | 9 | 42 / 58 | 0 / 10 | 2 | 28 |
| 11 | 10 | 40 / 58 | 20 / 8 | 2 | 42 |
| 12 | 11 | 38 / 58 | 18 / 9 | 2 | 59 |
| 13 | 12 | 36 / 58 | 27 / 7 | 3 | 14 |
| 14 | 13 | 34 / 58 | 34 / 6 | 3 | 29 |
| 15 | 14 | 33 / 58 | 40 / 5 | 3 | 45 |
| 16 | 15 | 30 / 58 | 46 / 4 | 4 | 1 |
| 17 | 16 | 28 / 58 | 49 / 3 | 4 | 17 |
| 18 | 17 | 26 / 58 | 52 / 1 | 4 | 33 |
| 19 | 18 | 24 / 58 | 53 / 2 | 4 | 49 |
| 20 | 19 | 22 / 57 | 55 / 59 | 5 | 5 |
| 21 | 20 | 20 / 57 | 54 / 57 | 5 | 21 |
| 22 | 21 | 18 / 57 | 51 / 51 | 5 | 38 |
| 23 | 22 | 16 / 57 | 46 / 54 | 5 | 55 |
| 24 | 23 | 14 / 57 | 40 / 51 | 6 | 12 |
| 25 | 24 | 12 / 57 | 31 / 51 | 6 | 31 |
| 26 | 25 | 10 / 57 | 22 / 48 | 6 | 47 |
| 27 | 26 | 8 / 57 | 10 / 46 | 7 | 5 |
| 28 | 27 | 5 / 57 | 56 / 42 | 7 | 23 |
| 29 | 28 | 3 / 57 | 38 / 42 | 7 | 43 |
| 30 | 29 | 1 / 57 | 20 / 38 | 8 | 1 |
| 31 | 29 | 58 / 57 | 58 / 35 | 8 | 20 |
| 32 | 30 | 56 / 57 | 33 / 32 | 8 | 40 |
| 33 | 31 | 54 / 57 | 5 / 30 | 9 | 0 |
| 34 | 32 | 51 / 57 | 35 / 25 | 9 | 20 |
| 35 | 33 | 49 / 57 | 0 / 22 | 9 | 41 |
| 36 | 34 | 46 / 57 | 22 / 18 | 10 | 2 |
| 37 | 35 | 43 / 57 | 40 / 16 | 10 | 25 |
| 38 | 36 | 40 / 57 | 56 / 9 | 10 | 46 |
| 39 | 37 | 38 / 57 | 5 / 6 | 11 | 9 |
| 40 | 38 | 35 / 57 | 11 / 1 | 11 | 31 |
| 41 | 39 | 32 / 56 | 12 / 56 | 11 | 56 |
| 42 | 40 | 29 / 56 | 8 / 49 | 12 | 21 |
| 43 | 41 | 25 / 56 | 57 / 44 | 12 | 47 |
| 44 | 42 | 22 / 56 | 41 / 40 | 13 | 14 |
| 45 | 43 | 19 / 56 | 21 / 31 | 13 | 38 |
| 46 | 44 | 15 / 56 | 52 / 25 | 14 | 6 |
| 47 | 45 | 12 / 56 | 17 / 18 | 14 | 35 |
| 48 | 46 | 8 / 56 | 35 / 8 | 15 | 3 |
| 49 | 47 | 4 / 56 | 43 / 1 | 15 | 34 |
| 50 | 48 | 0 / 55 | 44 / 52 | 16 | 6 |
| 51 | 48 | 50 / 55 | 36 / 42 | 16 | 38 |
| 52 | 49 | 52 / 55 | 18 / 31 | 17 | 10 |
| 53 | 50 | 47 / 55 | 49 / 21 | 17 | 46 |
| 54 | 51 | 43 / 55 | 10 / 7 | 18 | 21 |
| 55 | 52 | 38 / 54 | 17 / 56 | 19 | 0 |
| 56 | 53 | 33 / 54 | 13 / 40 | 19 | 37 |
| 57 | 54 | 27 / 54 | 53 / 26 | 20 | 18 |
| 58 | 55 | 22 / 54 | 19 / 9 | 21 | 0 |
| 59 | 56 | 16 / 53 | 38 / 50 | 21 | 43 |
| 60 | 57 | 10 / 53 | 18 / 32 | 22 | 29 |
| 61 | 58 | 3 / 53 | 50 / 11 | 23 | 17 |
| 62 | 58 | 57 / 52 | 1 / 48 | 24 | 7 |
| 63 | 59 | 49 / 52 | 49 / 23 | 24 | 49 |
| 64 | 60 | 42 / 51 | 12 / 54 | 25 | 54 |
| 65 | 61 | 34 / 51 | 6 / 26 | 26 | 51 |
| 66 | 62 | 25 / 50 | 32 / 52 | 27 | 52 |
| 67 | 63 | 16 / 50 | 34 / 14 | 28 | 54 |
| 68 | 64 | 6 / 49 | 39 / 38 | 30 | 1 |
| 69 | 65 | 56 / 48 | 17 / 52 | 31 | 10 |
| 70 | 66 | 45 / 48 | 9 / 3 | 32 | 22 |
| 71 | 66 | 33 / 47 | 12 / 12 | 33 | 42 |
| 72 | 67 | 20 / 46 | 24 / 10 | 34 | 49 |
| 73 | 68 | 6 / 44 | 34 / 6 | 36 | 23 |
| 74 | 68 | 51 / 43 | 40 / 52 | 37 | 53 |
| 75 | 69 | 35 / 42 | 32 / 30 | 39 | 25 |
| 76 | 70 | 18 / 41 | 2 / 0 | 41 | 0 |
| 77 | 70 | 59 / 39 | 2 / 20 | 42 | 40 |
| 78 | 71 | 38 / 37 | 22 / 27 | 44 | 20 |
| 79 | 72 | 17 / 35 | 49 / 23 | 45 | 7 |
| 80 | 72 | 51 / 33 | 12 / 8 | 47 | 53 |
| 81 | 73 | 24 / 30 | 20 / 35 | 49 | 38 |
| 82 | 73 | 44 / 27 | 55 / 48 | 51 | 23 |
| 83 | 74 | 22 / 24 | 43 / 49 | 53 | 8 |
| 84 | 74 | 47 / 21 | 32 / 31 | 54 | 42 |
| 85 | 75 | 9 / 18 | 3 / 0 | 56 | 11 |
| 86 | 75 | 27 / 14 | 3 / 16 | 57 | 28 |
| 87 | 75 | 41 / 10 | 19 / 20 | 58 | 32 |
| 88 | 75 | 51 / 6 | 39 / 16 | 59 | 20 |
| 89 | 75 | 57 / 2 | 55 / 5 | 59 | 49 |
| 90 | 76 | 0 / 0 | 0 / 0 | 60 | 0 |

# 77

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|---|---|---|---|---|---|---|---|
| 1 | 0 | 58 | 58 | 28 | 28 | 0 | 14 |
| 2 | 1 | 56 | 58 | 56 | 27 | 0 | 27 |
| 3 | 2 | 55 | 58 | 33 | 27 | 0 | 41 |
| 4 | 3 | 53 | 58 | 50 | 27 | 0 | 55 |
| 5 | 4 | 52 | 58 | 17 | 27 | 1 | 9 |
| 6 | 5 | 50 | 58 | 44 | 27 | 1 | 22 |
| 7 | 6 | 49 | 58 | 11 | 26 | 1 | 35 |
| 8 | 7 | 47 | 58 | 37 | 26 | 1 | 49 |
| 9 | 8 | 46 | 58 | 3 | 25 | 2 | 3 |
| 10 | 9 | 44 | 58 | 28 | 24 | 2 | 17 |
| 11 | 10 | 43 | 58 | 52 | 25 | 2 | 32 |
| 12 | 11 | 41 | 58 | 17 | 24 | 2 | 45 |
| 13 | 12 | 39 | 58 | 41 | 22 | 3 | 0 |
| 14 | 13 | 38 | 58 | 3 | 22 | 3 | 14 |
| 15 | 14 | 36 | 58 | 21 | 21 | 3 | 28 |
| 16 | 15 | 34 | 58 | 46 | 20 | 3 | 42 |
| 17 | 16 | 33 | 58 | 6 | 18 | 3 | 57 |
| 18 | 17 | 31 | 58 | 24 | 18 | 4 | 13 |
| 19 | 18 | 29 | 58 | 42 | 18 | 4 | 28 |
| 20 | 19 | 28 | 58 | 0 | 15 | 4 | 42 |
| 21 | 20 | 26 | 58 | 15 | 14 | 4 | 58 |
| 22 | 21 | 24 | 58 | 29 | 12 | 5 | 13 |
| 23 | 22 | 22 | 58 | 41 | 11 | 5 | 29 |
| 24 | 23 | 20 | 58 | 52 | 10 | 5 | 45 |
| 25 | 24 | 19 | 58 | 2 | 7 | 6 | 1 |
| 26 | 25 | 17 | 58 | 9 | 6 | 6 | 19 |
| 27 | 26 | 15 | 58 | 15 | 4 | 6 | 35 |
| 28 | 27 | 13 | 58 | 19 | 2 | 6 | 52 |
| 29 | 28 | 11 | 58 | 21 | 0 | 7 | 9 |
| 30 | 29 | 9 | 57 | 21 | 57 | 7 | 27 |
| 31 | 30 | 7 | 57 | 18 | 55 | 7 | 44 |
| 32 | 31 | 5 | 57 | 13 | 52 | 8 | 2 |
| 33 | 32 | 3 | 57 | 5 | 50 | 8 | 21 |
| 34 | 33 | 0 | 57 | 55 | 46 | 8 | 40 |
| 35 | 33 | 58 | 57 | 41 | 43 | 9 | 0 |
| 36 | 34 | 56 | 57 | 34 | 41 | 9 | 19 |
| 37 | 35 | 54 | 57 | 5 | 37 | 9 | 38 |
| 38 | 36 | 51 | 57 | 42 | 32 | 10 | 0 |
| 39 | 37 | 49 | 57 | 14 | 28 | 10 | 21 |
| 40 | 38 | 46 | 57 | 45 | 26 | 10 | 44 |
| 41 | 39 | 44 | 57 | 8 | 20 | 11 | 6 |
| 42 | 40 | 41 | 57 | 29 | 15 | 11 | 28 |
| 43 | 41 | 38 | 57 | 44 | 11 | 11 | 51 |
| 44 | 42 | 35 | 57 | 55 | 4 | 12 | 16 |
| 45 | 43 | 32 | 56 | 59 | 59 | 12 | 42 |
| 46 | 44 | 29 | 56 | 48 | 54 | 13 | 7 |
| 47 | 45 | 26 | 56 | 42 | 46 | 13 | 34 |
| 48 | 46 | 23 | 56 | 38 | 39 | 14 | 1 |
| 49 | 47 | 20 | 56 | 17 | 33 | 14 | 30 |
| 50 | 48 | 16 | 56 | 40 | 24 | 14 | 59 |
| 51 | 49 | 13 | 56 | 14 | 14 | 15 | 29 |
| 52 | 50 | 9 | 56 | 28 | 7 | 16 | 1 |
| 53 | 51 | 5 | 51 | 35 | 56 | 16 | 34 |
| 54 | 52 | 1 | 51 | 31 | 46 | 17 | 7 |
| 55 | 52 | 57 | 51 | 17 | 33 | 17 | 43 |
| 56 | 53 | 52 | 55 | 40 | 21 | 18 | 20 |
| 57 | 54 | 48 | 55 | 11 | 8 | 18 | 58 |
| 58 | 55 | 43 | 54 | 19 | 42 | 19 | 39 |
| 59 | 56 | 38 | 54 | 11 | 36 | 20 | 20 |
| 60 | 57 | 32 | 54 | 47 | 20 | 21 | 4 |
| 61 | 58 | 27 | 54 | 7 | 1 | 21 | 50 |
| 62 | 59 | 21 | 53 | 8 | 40 | 22 | 38 |
| 63 | 60 | 14 | 53 | 48 | 18 | 23 | 28 |
| 64 | 61 | 8 | 52 | 6 | 51 | 24 | 19 |
| 65 | 62 | 0 | 52 | 57 | 27 | 25 | 11 |
| 66 | 62 | 53 | 51 | 34 | 54 | 26 | 3 |
| 67 | 63 | 45 | 51 | 18 | 22 | 27 | 16 |
| 68 | 64 | 36 | 50 | 40 | 47 | 28 | 20 |
| 69 | 65 | 27 | 50 | 27 | 4 | 29 | 27 |
| 70 | 66 | 17 | 49 | 31 | 23 | 30 | 41 |
| 71 | 67 | 6 | 48 | 54 | 29 | 31 | 55 |
| 72 | 67 | 55 | 47 | 33 | 34 | 33 | 15 |
| 73 | 68 | 43 | 46 | 53 | 36 | 34 | 43 |
| 74 | 69 | 29 | 45 | 33 | 24 | 36 | 7 |
| 75 | 70 | 14 | 44 | 57 | 5 | 37 | 39 |
| 76 | 70 | 59 | 42 | 2 | 40 | 39 | 20 |
| 77 | 71 | 41 | 41 | 42 | 0 | 41 | 0 |
| 78 | 72 | 22 | 39 | 42 | 14 | 42 | 51 |
| 79 | 73 | 2 | 37 | 56 | 9 | 44 | 38 |
| 80 | 73 | 39 | 34 | 5 | 53 | 46 | 30 |
| 81 | 74 | 13 | 32 | 58 | 20 | 48 | 24 |
| 82 | 74 | 46 | 29 | 18 | 33 | 50 | 21 |
| 83 | 75 | 15 | 26 | 51 | 23 | 52 | 10 |
| 84 | 75 | 42 | 23 | 14 | 0 | 53 | 57 |
| 85 | 76 | 5 | 19 | 15 | 17 | 55 | 38 |
| 86 | 76 | 24 | 15 | 31 | 20 | 57 | 5 |
| 87 | 76 | 39 | 11 | 51 | 8 | 58 | 19 |
| 88 | 76 | 50 | 0 | 59 | 24 | 59 | 14 |
| 89 | 76 | 57 | 2 | 44 | 10 | 59 | 49 |
| 90 | 77 | 0 | 0 | 0 | 0 | 60 | 0 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 58/58 | 42/41 | 0 | 12 | 31 | 30 | 15/58 | 2/13 | 7 | 8 | 61 | 58 | 48/52 | 57/49 | 20 | 18 |
| 2 | 1 | 57/58 | 33/41 | 0 | 25 | 32 | 31 | 13/58 | 15/11 | 7 | 25 | 62 | 59 | 43/52 | 46/30 | 21 | 2 |
| 3 | 2 | 56/58 | 4/41 | 0 | 38 | 33 | 32 | 11/58 | 26/9 | 7 | 42 | 63 | 60 | 38/52 | 16/9 | 21 | 51 |
| 4 | 3 | 54/58 | 44/41 | 0 | 50 | 34 | 33 | 9/58 | 35/6 | 8 | 0 | 64 | 61 | 32/53 | 25/47 | 22 | 42 |
| 5 | 4 | 53/58 | 26/40 | 1 | 3 | 35 | 34 | 7/58 | 41/2 | 8 | 17 | 65 | 62 | 26/53 | 12/25 | 23 | 37 |
| 6 | 5 | 52/58 | 6/40 | 1 | 16 | 36 | 35 | 5/58 | 42/0 | 8 | 37 | 66 | 63 | 19/52 | 37/57 | 24 | 31 |
| 7 | 6 | 50/58 | 46/40 | 1 | 29 | 37 | 36 | 3/57 | 42/59 | 8 | 56 | 67 | 64 | 12/52 | 34/26 | 25 | 30 |
| 8 | 7 | 49/58 | 26/40 | 1 | 41 | 38 | 37 | 1/57 | 42/53 | 9 | 14 | 68 | 65 | 5/51 | 0/54 | 26 | 34 |
| 9 | 8 | 48/58 | 6/39 | 1 | 53 | 39 | 37 | 59/57 | 35/51 | 9 | 34 | 69 | 65 | 56/51 | 54/18 | 27 | 39 |
| 10 | 9 | 46/58 | 44/39 | 2 | 6 | 40 | 38 | 57/57 | 26/48 | 9 | 54 | 70 | 66 | 48/50 | 12/37 | 28 | 49 |
| 11 | 10 | 45/58 | 24/38 | 2 | 19 | 41 | 39 | 55/57 | 34/43 | 10 | 14 | 71 | 67 | 38/49 | 49/49 | 30 | 2 |
| 12 | 11 | 44/58 | 2/39 | 2 | 33 | 42 | 40 | 52/57 | 57/38 | 10 | 36 | 72 | 68 | 28/49 | 38/2 | 31 | 23 |
| 13 | 12 | 42/58 | 41/36 | 2 | 46 | 43 | 41 | 50/57 | 35/36 | 10 | 58 | 73 | 69 | 17/48 | 40/0 | 32 | 44 |
| 14 | 13 | 41/58 | 17/36 | 2 | 59 | 44 | 42 | 48/57 | 11/30 | 11 | 20 | 74 | 70 | 5/46 | 40/58 | 34 | 16 |
| 15 | 14 | 39/58 | 53/36 | 3 | 12 | 45 | 43 | 46/57 | 41/24 | 11 | 43 | 75 | 70 | 52/44 | 38/44 | 35 | 51 |
| 16 | 15 | 38/58 | 29/34 | 3 | 26 | 46 | 44 | 43/57 | 5/21 | 12 | 8 | 76 | 71 | 38/44 | 22/20 | 37 | 27 |
| 17 | 16 | 37/58 | 3/34 | 3 | 39 | 47 | 45 | 40/57 | 26/13 | 12 | 33 | 77 | 72 | 22/42 | 42/51 | 39 | 14 |
| 18 | 17 | 35/58 | 37/33 | 3 | 53 | 48 | 46 | 37/57 | 39/8 | 12 | 58 | 78 | 73 | 5/41 | 33/1 | 41 | 1 |
| 19 | 18 | 34/58 | 10/32 | 4 | 6 | 49 | 47 | 34/57 | 47/2 | 13 | 25 | 79 | 73 | 46/39 | 34/1 | 42 | 46 |
| 20 | 19 | 32/58 | 42/31 | 4 | 20 | 50 | 48 | 31/56 | 49/54 | 13 | 52 | 80 | 74 | 25/36 | 35/47 | 44 | 49 |
| 21 | 20 | 31/58 | 13/29 | 4 | 34 | 51 | 49 | 28/56 | 43/46 | 14 | 20 | 81 | 75 | 2/34 | 22/17 | 47 | 0 |
| 22 | 21 | 29/58 | 42/28 | 4 | 49 | 52 | 50 | 25/56 | 39/40 | 14 | 51 | 82 | 75 | 36/31 | 39/22 | 48 | 49 |
| 23 | 22 | 28/58 | 10/27 | 5 | 4 | 53 | 51 | 22/56 | 9/29 | 15 | 20 | 83 | 76 | 8/28 | 1/10 | 50 | 4 |
| 24 | 23 | 26/58 | 37/26 | 5 | 18 | 54 | 52 | 18/56 | 38/22 | 15 | 53 | 84 | 76 | 36/24 | 11/41 | 53 | 6 |
| 25 | 24 | 25/58 | 3/25 | 5 | 33 | 55 | 53 | 14/56 | 0/10 | 16 | 27 | 85 | 77 | 0/20 | 52/44 | 54 | 56 |
| 26 | 25 | 23/58 | 28/22 | 5 | 48 | 56 | 54 | 11/54 | 10/49 | 17 | 0 | 86 | 77 | 20/10 | 36/34 | 56 | 37 |
| 27 | 26 | 21/58 | 50/21 | 6 | 4 | 57 | 55 | 7/54 | 9/49 | 17 | 35 | 87 | 77 | 38/12 | 10/3 | 58 | 1 |
| 28 | 27 | 20/58 | 11/19 | 6 | 12 | 58 | 56 | 3/54 | 58/33 | 18 | 13 | 88 | 77 | 50/7 | 13/20 | 59 | 4 |
| 29 | 28 | 18/58 | 30/18 | 6 | 35 | 59 | 56 | 58/54 | 31/20 | 18 | 53 | 89 | 77 | 57/2 | 33/21 | 59 | 44 |
| 30 | 29 | 16/58 | 48/14 | 6 | 51 | 60 | 57 | 43/54 | 41/6 | 19 | 36 | 90 | 78 | 0/0 | 0/0 | 60 | |

# 19

| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 58<br>58 | 54<br>54 | 0 | 11 |
| 2 | 1 | 57<br>58 | 48<br>54 | 0 | 23 |
| 3 | 2 | 56<br>58 | 42<br>53 | 0 | 34 |
| 4 | 3 | 55<br>58 | 39<br>54 | 0 | 46 |
| 5 | 4 | 54<br>58 | 29<br>53 | 0 | 57 |
| 6 | 5 | 53<br>58 | 33<br>53 | 1 | 9 |
| 7 | 6 | 52<br>58 | 15<br>52 | 1 | 20 |
| 8 | 7 | 51<br>58 | 7<br>52 | 1 | 33 |
| 9 | 8 | 49<br>58 | 59<br>52 | 1 | 44 |
| 10 | 9 | 48<br>58 | 51<br>52 | 1 | 56 |
| 11 | 10 | 47<br>58 | 43<br>52 | 2 | 7 |
| 12 | 11 | 46<br>58 | 35<br>51 | 2 | 20 |
| 13 | 12 | 45<br>58 | 26<br>50 | 2 | 32 |
| 14 | 13 | 44<br>58 | 16<br>49 | 2 | 43 |
| 15 | 14 | 43<br>58 | 9<br>50 | 2 | 56 |
| 16 | 15 | 41<br>58 | 59<br>47 | 3 | 7 |
| 17 | 16 | 40<br>58 | 42<br>48 | 3 | 21 |
| 18 | 17 | 39<br>58 | 30<br>46 | 3 | 33 |
| 19 | 18 | 38<br>58 | 16<br>46 | 3 | 46 |
| 20 | 19 | 37<br>58 | 2<br>46 | 3 | 59 |
| 21 | 20 | 35<br>58 | 48<br>43 | 4 | 11 |
| 22 | 21 | 34<br>58 | 31<br>43 | 4 | 25 |
| 23 | 22 | 33<br>58 | 14<br>41 | 4 | 37 |
| 24 | 23 | 31<br>58 | 55<br>41 | 4 | 51 |
| 25 | 24 | 30<br>58 | 36<br>40 | 5 | 6 |
| 26 | 25 | 29<br>58 | 16<br>39 | 5 | 19 |
| 27 | 26 | 27<br>58 | 54<br>36 | 5 | 32 |
| 28 | 27 | 26<br>58 | 30<br>35 | 5 | 47 |
| 29 | 28 | 25<br>58 | 5<br>34 | 6 | 2 |
| 30 | 29 | 23<br>58 | 39<br>31 | 6 | 17 |

| | | | | | |
|---|---|---|---|---|---|
| 31 | 30 | 22<br>58 | 10<br>30 | 6 | 32 |
| 32 | 31 | 20<br>58 | 40<br>28 | 6 | 41 |
| 33 | 32 | 19<br>58 | 8<br>27 | 7 | 3 |
| 34 | 33 | 17<br>58 | 39<br>23 | 7 | 19 |
| 35 | 34 | 15<br>58 | 48<br>22 | 7 | 36 |
| 36 | 35 | 14<br>58 | 20<br>19 | 7 | 52 |
| 37 | 36 | 12<br>58 | 39<br>17 | 8 | 11 |
| 38 | 37 | 10<br>58 | 56<br>13 | 8 | 27 |
| 39 | 38 | 9<br>58 | 9<br>11 | 8 | 45 |
| 40 | 39 | 7<br>58 | 20<br>8 | 9 | 4 |
| 41 | 40 | 5<br>58 | 28<br>5 | 9 | 24 |
| 42 | 41 | 3<br>58 | 33<br>0 | 9 | 42 |
| 43 | 42 | 1<br>57 | 33<br>54 | 10 | 3 |
| 44 | 42 | 59<br>57 | 31<br>53 | 10 | 24 |
| 45 | 43 | 57<br>57 | 24<br>49 | 10 | 46 |
| 46 | 44 | 54<br>57 | 13<br>46 | 11 | 7 |
| 47 | 45 | 52<br>57 | 59<br>38 | 11 | 30 |
| 48 | 46 | 50<br>57 | 37<br>35 | 11 | 54 |
| 49 | 47 | 48<br>57 | 12<br>29 | 12 | 19 |
| 50 | 48 | 45<br>57 | 44<br>23 | 12 | 44 |
| 51 | 49 | 43<br>57 | 4<br>16 | 13 | 10 |
| 52 | 50 | 40<br>57 | 20<br>9 | 13 | 39 |
| 53 | 51 | 37<br>57 | 29<br>2 | 14 | 6 |
| 54 | 52 | 34<br>56 | 31<br>54 | 14 | 36 |
| 55 | 53 | 31<br>56 | 25<br>45 | 15 | 1 |
| 56 | 54 | 28<br>56 | 10<br>34 | 15 | 38 |
| 57 | 55 | 24<br>56 | 44<br>27 | 16 | 14 |
| 58 | 56 | 21<br>56 | 11<br>13 | 16 | 48 |
| 59 | 57 | 17<br>56 | 24<br>3 | 17 | 24 |
| 60 | 58 | 13<br>55 | 27<br>44 | 18 | 3 |

| | | | | | |
|---|---|---|---|---|---|
| 61 | 59 | 9<br>55 | 14<br>33 | 18 | 43 |
| 62 | 60 | 4<br>55 | 48<br>19 | 19 | 29 |
| 63 | 61 | 0<br>55 | 7<br>0 | 20 | 12 |
| 64 | 61 | 55<br>54 | 7<br>42 | 21 | 0 |
| 65 | 62 | 49<br>54 | 49<br>19 | 21 | 50 |
| 66 | 63 | 44<br>53 | 8<br>56 | 22 | 43 |
| 67 | 64 | 38<br>53 | 4<br>30 | 23 | 41 |
| 68 | 65 | 31<br>52 | 34<br>59 | 24 | 39 |
| 69 | 66 | 24<br>52 | 33<br>28 | 25 | 45 |
| 70 | 67 | 17<br>51 | 1<br>50 | 26 | 51 |
| 71 | 68 | 8<br>51 | 51<br>10 | 28 | 3 |
| 72 | 69 | 0<br>50 | 1<br>25 | 29 | 21 |
| 73 | 69 | 50<br>49 | 25<br>31 | 30 | 42 |
| 74 | 70 | 39<br>48 | 56<br>31 | 32 | 10 |
| 75 | 71 | 28<br>47 | 27<br>22 | 33 | 43 |
| 76 | 72 | 15<br>46 | 49<br>7 | 35 | 23 |
| 77 | 73 | 1<br>44 | 56<br>38 | 37 | 9 |
| 78 | 73 | 46<br>42 | 32<br>56 | 39 | 1 |
| 79 | 74 | 29<br>41 | 30<br>4 | 41 | 4 |
| 80 | 75 | 10<br>38 | 32<br>48 | 43 | 4 |
| 81 | 75 | 49<br>36 | 22<br>16 | 45 | 14 |
| 82 | 76 | 25<br>33 | 38<br>27 | 47 | 32 |
| 83 | 76 | 59<br>30 | 5<br>12 | 49 | 47 |
| 84 | 77 | 29<br>26 | 17<br>31 | 51 | 46 |
| 85 | 77 | 51<br>22 | 48<br>25 | 54 | 5 |
| 86 | 78 | 18<br>17 | 13<br>58 | 56 | 2 |
| 87 | 78 | 36<br>13 | 11<br>7 | 57 | 40 |
| 88 | 78 | 49<br>7 | 18<br>59 | 58 | 57 |
| 89 | 78 | 57<br>2 | 57<br>33 | 59 | 45 |
| 90 | 79 | 0<br>0 | 0<br>0 | 60 | 0 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 59 / 59 | 5 / 6 | 0 | 11 | 31 | 30 | 28 / 58 | 42 / 45 | 5 | 56 | 61 | 59 | 27 / 56 | 58 / 19 | 17 | 8 |
| 2 | 1 | 58 / 59 | 11 / 5 | 0 | 20 | 32 | 31 | 27 / 58 | 27 / 44 | 6 | 10 | 62 | 60 | 24 / 56 | 17 / 2 | 17 | 46 |
| 3 | 2 | 57 / 59 | 16 / 5 | 0 | 31 | 33 | 32 | 26 / 58 | 11 / 43 | 6 | 23 | 63 | 61 | 20 / 55 | 19 / 48 | 18 | 29 |
| 4 | 3 | 56 / 59 | 21 / 5 | 0 | 41 | 34 | 33 | 24 / 58 | 54 / 40 | 6 | 38 | 64 | 62 | 16 / 55 | 7 / 32 | 19 | 15 |
| 5 | 4 | 55 / 59 | 26 / 5 | 0 | 52 | 35 | 34 | 23 / 58 | 34 / 38 | 6 | 53 | 65 | 63 | 11 / 55 | 39 / 12 | 20 | 1 |
| 6 | 5 | 54 / 59 | 31 / 4 | 1 | 2 | 36 | 35 | 22 / 58 | 12 / 38 | 7 | 9 | 66 | 64 | 6 / 55 | 51 / 54 | 20 | 50 |
| 7 | 6 | 53 / 59 | 35 / 4 | 1 | 13 | 37 | 36 | 20 / 58 | 50 / 33 | 7 | 23 | 67 | 65 | 1 / 54 | 45 / 28 | 21 | 44 |
| 8 | 7 | 52 / 59 | 39 / 4 | 1 | 24 | 38 | 37 | 19 / 58 | 22 / 30 | 7 | 40 | 68 | 65 | 56 / 54 | 13 / 5 | 22 | 42 |
| 9 | 8 | 51 / 59 | 43 / 4 | 1 | 35 | 39 | 38 | 17 / 58 | 54 / 30 | 7 | 57 | 69 | 66 | 50 / 53 | 18 / 34 | 23 | 42 |
| 10 | 9 | 50 / 59 | 47 / 3 | 1 | 45 | 40 | 39 | 16 / 58 | 24 / 28 | 8 | 14 | 70 | 67 | 43 / 53 | 52 / 2 | 24 | 46 |
| 11 | 10 | 49 / 59 | 50 / 4 | 1 | 56 | 41 | 40 | 14 / 58 | 52 / 23 | 8 | 31 | 71 | 68 | 36 / 52 | 54 / 28 | 25 | 57 |
| 12 | 11 | 48 / 59 | 54 / 3 | 2 | 5 | 42 | 41 | 13 / 58 | 54 / 29 | 8 | 50 | 72 | 69 | 29 / 51 | 22 / 45 | 27 | 10 |
| 13 | 12 | 47 / 59 | 58 / 1 | 2 | 16 | 43 | 42 | 11 / 58 | 36 / 19 | 9 | 7 | 73 | 70 | 21 / 50 | 7 / 59 | 28 | 28 |
| 14 | 13 | 46 / 59 | 59 / 2 | 2 | 28 | 44 | 43 | 9 / 58 | 55 / 14 | 9 | 27 | 74 | 71 | 12 / 50 | 6 / 4 | 29 | 55 |
| 15 | 14 | 46 / 59 | 1 / 1 | 2 | 39 | 45 | 44 | 8 / 58 | 10 / 10 | 9 | 46 | 75 | 72 | 2 / 49 | 10 / 2 | 31 | 28 |
| 16 | 15 | 45 / 59 | 2 / 1 | 2 | 50 | 46 | 45 | 6 / 58 | 20 / 9 | 10 | 8 | 76 | 72 | 51 / 47 | 12 / 53 | 33 | 8 |
| 17 | 16 | 44 / 59 | 3 / 0 | 3 | 1 | 47 | 46 | 4 / 58 | 29 / 2 | 10 | 27 | 77 | 73 | 39 / 46 | 5 / 30 | 34 | 53 |
| 18 | 17 | 43 / 58 | 3 / 59 | 3 | 12 | 48 | 47 | 2 / 58 | 31 / 0 | 10 | 49 | 78 | 74 | 25 / 44 | 35 / 59 | 36 | 47 |
| 19 | 18 | 42 / 58 | 2 / 59 | 3 | 24 | 49 | 48 | 0 / 57 | 31 / 49 | 11 | 12 | 79 | 75 | 10 / 43 | 34 / 4 | 38 | 48 |
| 20 | 19 | 41 / 58 | 1 / 58 | 3 | 36 | 50 | 49 | 58 / 57 | 25 / 49 | 11 | 35 | 80 | 75 | 53 / 40 | 38 / 53 | 40 | 58 |
| 21 | 20 | 39 / 58 | 59 / 57 | 3 | 47 | 51 | 50 | 56 / 57 | 14 / 45 | 11 | 59 | 81 | 76 | 32 / 38 | 36 / 34 | 43 | 21 |
| 22 | 21 | 38 / 58 | 56 / 55 | 3 | 59 | 52 | 51 | 53 / 57 | 59 / 36 | 12 | 23 | 82 | 77 | 13 / 35 | 10 / 22 | 44 | 40 |
| 23 | 22 | 37 / 58 | 51 / 55 | 4 | 12 | 53 | 52 | 51 / 57 | 35 / 32 | 12 | 50 | 83 | 77 | 48 / 32 | 52 / 21 | 48 | 3 |
| 24 | 23 | 36 / 58 | 46 / 56 | 4 | 24 | 54 | 53 | 49 / 57 | 7 / 25 | 13 | 18 | 84 | 78 | 21 / 28 | 13 / 40 | 50 | 37 |
| 25 | 24 | 35 / 58 | 43 / 53 | 4 | 36 | 55 | 54 | 48 / 57 | 32 / 16 | 13 | 46 | 85 | 78 | 49 / 24 | 53 / 22 | 53 | 1 |
| 26 | 25 | 34 / 58 | 35 / 51 | 4 | 48 | 56 | 55 | 43 / 57 | 48 / 10 | 14 | 16 | 86 | 79 | 14 / 19 | 15 / 36 | 55 | 13 |
| 27 | 26 | 33 / 58 | 26 / 51 | 5 | 2 | 57 | 56 | 40 / 57 | 58 / 1 | 14 | 48 | 87 | 79 | 33 / 14 | 51 / 24 | 57 | 10 |
| 28 | 27 | 32 / 58 | 17 / 50 | 5 | 15 | 58 | 57 | 37 / 56 | 59 / 49 | 15 | 19 | 88 | 79 | 48 / 8 | 15 / 47 | 58 | 41 |
| 29 | 28 | 31 / 58 | 7 / 49 | 5 | 27 | 59 | 58 | 34 / 56 | 48 / 42 | 15 | 54 | 89 | 79 | 57 / 2 | 2 / 58 | 59 | 40 |
| 30 | 29 | 29 / 58 | 56 / 26 | 5 | 41 | 60 | 59 | 31 / 56 | 30 / 28 | 16 | 30 | 90 | 80 | 0 / 0 | 0 / 0 | 60 | 0 |

# 81

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 59 | 16 | 59 | 15 | 0 | 9 |
| 2 | 1 | 58 | 31 | 59 | 16 | 0 | 19 |
| 3 | 2 | 57 | 47 | 59 | 15 | 0 | 28 |
| 4 | 3 | 57 | 2 | 59 | 16 | 0 | 38 |
| 5 | 4 | 56 | 18 | 59 | 15 | 0 | 46 |
| 6 | 5 | 55 | 33 | 59 | 15 | 0 | 56 |
| 7 | 6 | 54 | 48 | 59 | 15 | 1 | 5 |
| 8 | 7 | 54 | 3 | 59 | 15 | 1 | 15 |
| 9 | 8 | 53 | 18 | 59 | 14 | 1 | 24 |
| 10 | 9 | 52 | 33 | 59 | 14 | 1 | 34 |
| 11 | 10 | 51 | 46 | 59 | 14 | 1 | 43 |
| 12 | 11 | 51 | 0 | 59 | 14 | 1 | 54 |
| 13 | 12 | 50 | 14 | 59 | 13 | 2 | 3 |
| 14 | 13 | 49 | 27 | 59 | 13 | 2 | 13 |
| 15 | 14 | 48 | 40 | 59 | 12 | 2 | 22 |
| 16 | 15 | 47 | 52 | 59 | 12 | 2 | 33 |
| 17 | 16 | 47 | 4 | 59 | 11 | 2 | 42 |
| 18 | 17 | 46 | 15 | 59 | 11 | 2 | 53 |
| 19 | 18 | 45 | 26 | 59 | 11 | 3 | 3 |
| 20 | 19 | 44 | 37 | 59 | 9 | 3 | 14 |
| 21 | 20 | 43 | 46 | 59 | 9 | 3 | 24 |
| 22 | 21 | 42 | 55 | 59 | 8 | 3 | 35 |
| 23 | 22 | 42 | 3 | 59 | 8 | 3 | 45 |
| 24 | 23 | 41 | 11 | 59 | 7 | 3 | 56 |
| 25 | 24 | 40 | 18 | 59 | 5 | 4 | 7 |
| 26 | 25 | 39 | 23 | 59 | 5 | 4 | 19 |
| 27 | 26 | 38 | 28 | 59 | 4 | 4 | 30 |
| 28 | 27 | 37 | 32 | 59 | 2 | 4 | 42 |
| 29 | 28 | 36 | 34 | 59 | 3 | 4 | 54 |
| 30 | 29 | 35 | 37 | 59 | 1 | 5 | 6 |
| 31 | 30 | 34 | 38 | 58 | 59 | 5 | 19 |
| 32 | 31 | 33 | 37 | 58 | 57 | 5 | 31 |
| 33 | 32 | 32 | 34 | 58 | 58 | 5 | 45 |
| 34 | 33 | 31 | 32 | 58 | 55 | 5 | 58 |
| 35 | 34 | 30 | 27 | 58 | 54 | 6 | 11 |
| 36 | 35 | 29 | 21 | 58 | 52 | 6 | 24 |
| 37 | 36 | 28 | 13 | 58 | 50 | 6 | 39 |
| 38 | 37 | 27 | 3 | 58 | 48 | 6 | 53 |
| 39 | 38 | 25 | 51 | 58 | 47 | 7 | 8 |
| 40 | 39 | 24 | 38 | 58 | 44 | 7 | 23 |
| 41 | 40 | 23 | 23 | 58 | 42 | 7 | 38 |
| 42 | 41 | 22 | 5 | 58 | 38 | 7 | 52 |
| 43 | 42 | 20 | 43 | 58 | 39 | 8 | 12 |
| 44 | 43 | 19 | 22 | 58 | 34 | 8 | 28 |
| 45 | 44 | 17 | 56 | 58 | 32 | 8 | 46 |
| 46 | 45 | 16 | 28 | 58 | 28 | 9 | 5 |
| 47 | 46 | 14 | 56 | 58 | 24 | 9 | 23 |
| 48 | 47 | 13 | 20 | 58 | 23 | 9 | 44 |
| 49 | 48 | 11 | 43 | 58 | 17 | 10 | 3 |
| 50 | 49 | 10 | 0 | 58 | 13 | 10 | 24 |
| 51 | 50 | 8 | 13 | 58 | 9 | 10 | 45 |
| 52 | 51 | 6 | 22 | 58 | 3 | 11 | 9 |
| 53 | 52 | 4 | 24 | 58 | 0 | 11 | 33 |
| 54 | 53 | 2 | 25 | 57 | 43 | 11 | 48 |
| 55 | 54 | 0 | 18 | 57 | 26 | 12 | 23 |
| 56 | 54 | 58 | 4 | 57 | 22 | 12 | 40 |
| 57 | 55 | 55 | 26 | 57 | 32 | 13 | 18 |
| 58 | 56 | 53 | 18 | 57 | 34 | 13 | 49 |
| 59 | 57 | 50 | 42 | 57 | 18 | 14 | 21 |
| 60 | 58 | 48 | 0 | 57 | 6 | 14 | 52 |
| 61 | 59 | 44 | 6 | 56 | 57 | 14 | 27 |
| 62 | 60 | 42 | 3 | 56 | 24 | 16 | 4 |
| 63 | 61 | 38 | 42 | 56 | 34 | 16 | 42 |
| 64 | 62 | 35 | 22 | 56 | 18 | 17 | 23 |
| 65 | 63 | 31 | 40 | 56 | 1 | 18 | 7 |
| 66 | 64 | 27 | 41 | 55 | 48 | 18 | 57 |
| 67 | 65 | 23 | 29 | 55 | 26 | 19 | 43 |
| 68 | 66 | 18 | 55 | 55 | 5 | 20 | 35 |
| 69 | 67 | 14 | 0 | 54 | 38 | 21 | 32 |
| 70 | 68 | 8 | 38 | 54 | 13 | 22 | 35 |
| 71 | 69 | 2 | 51 | 53 | 41 | 23 | 41 |
| 72 | 69 | 56 | 32 | 53 | 3 | 24 | 50 |
| 73 | 70 | 49 | 35 | 52 | 26 | 26 | 10 |
| 74 | 71 | 42 | 1 | 51 | 37 | 27 | 29 |
| 75 | 72 | 33 | 38 | 50 | 42 | 29 | 0 |
| 76 | 73 | 24 | 20 | 49 | 33 | 30 | 54 |
| 77 | 74 | 13 | 48 | 48 | 24 | 32 | 20 |
| 78 | 75 | 2 | 22 | 47 | 0 | 34 | 17 |
| 79 | 75 | 49 | 22 | 44 | 14 | 36 | 16 |
| 80 | 76 | 34 | 36 | 43 | 21 | 38 | 34 |
| 81 | 77 | 17 | 57 | 40 | 53 | 40 | 53 |
| 82 | 77 | 58 | 50 | 37 | 5 | 43 | 26 |
| 83 | 78 | 36 | 55 | 34 | 55 | 46 | 11 |
| 84 | 79 | 11 | 50 | 31 | 4 | 48 | 53 |
| 85 | 79 | 42 | 54 | 20 | 34 | 51 | 33 |
| 86 | 80 | 9 | 28 | 21 | 33 | 54 | 14 |
| 87 | 80 | 31 | 1 | 14 | 55 | 56 | 34 |
| 88 | 80 | 46 | 56 | 9 | 46 | 58 | 24 |
| 89 | 80 | 56 | 42 | 3 | 18 | 59 | 36 |
| 90 | 81 | 0 | 0 | 0 | 0 | 60 | 0 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 59 / 59 | 35 / 21 | 0 | 8 | 31 | 30 | 39 / 59 | 56 / 12 | 4 | 51 | 61 | 60 | 0 / 57 | 33 / 34 | 13 | 47 |
| 2 | 1 | 58 / 59 | 50 / 25 | 0 | 16 | 32 | 31 | 39 / 59 | 8 / 11 | 4 | 53 | 62 | 60 | 58 / 57 | 7 / 23 | 14 | 19 |
| 3 | 2 | 58 / 59 | 15 / 25 | 0 | 24 | 33 | 32 | 38 / 59 | 19 / 11 | 5 | 5 | 63 | 61 | 55 / 57 | 30 / 15 | 14 | 54 |
| 4 | 3 | 57 / 59 | 40 / 24 | 0 | 32 | 34 | 33 | 37 / 59 | 30 / 8 | 5 | 15 | 64 | 62 | 52 / 57 | 45 / 2 | 15 | 31 |
| 5 | 4 | 57 / 59 | 4 / 25 | 0 | 41 | 35 | 34 | 36 / 59 | 38 / 7 | 5 | 27 | 65 | 63 | 49 / 56 | 47 / 51 | 16 | 9 |
| 6 | 5 | 56 / 59 | 29 / 24 | 0 | 49 | 36 | 35 | 35 / 59 | 45 / 7 | 5 | 40 | 66 | 64 | 46 / 56 | 38 / 34 | 16 | 52 |
| 7 | 6 | 55 / 59 | 53 / 25 | 0 | 58 | 37 | 36 | 34 / 59 | 52 / 4 | 5 | 52 | 67 | 64 | 43 / 56 | 12 / 18 | 17 | 37 |
| 8 | 7 | 55 / 59 | 18 / 24 | 1 | 6 | 38 | 37 | 33 / 59 | 56 / 3 | 6 | 5 | 68 | 66 | 39 / 56 | 30 / 2 | 18 | 27 |
| 9 | 8 | 54 / 59 | 42 / 24 | 1 | 14 | 39 | 38 | 32 / 59 | 59 / 2 | 6 | 19 | 69 | 67 | 34 / 55 | 32 / 41 | 19 | 19 |
| 10 | 9 | 54 / 59 | 6 / 23 | 1 | 23 | 40 | 39 | 32 / 59 | 1 / 0 | 6 | 33 | 70 | 68 | 31 / 55 | 13 / 19 | 20 | 14 |
| 11 | 10 | 53 / 59 | 29 / 25 | 1 | 32 | 41 | 40 | 31 / 58 | 1 / 58 | 6 | 46 | 71 | 69 | 26 / 54 | 32 / 50 | 21 | 15 |
| 12 | 11 | 52 / 59 | 54 / 23 | 1 | 40 | 42 | 41 | 29 / 58 | 59 / 56 | 7 | 1 | 72 | 70 | 21 / 54 | 22 / 23 | 22 | 23 |
| 13 | 12 | 52 / 59 | 17 / 23 | 1 | 48 | 43 | 42 | 28 / 58 | 55 / 55 | 7 | 16 | 73 | 71 | 15 / 53 | 44 / 44 | 23 | 33 |
| 14 | 13 | 51 / 59 | 40 / 22 | 1 | 57 | 44 | 43 | 27 / 58 | 50 / 52 | 7 | 30 | 74 | 72 | 9 / 53 | 30 / 8 | 24 | 49 |
| 15 | 14 | 51 / 59 | 2 / 23 | 2 | 6 | 45 | 44 | 26 / 58 | 42 / 51 | 7 | 46 | 75 | 73 | 2 / 52 | 38 / 17 | 26 | 16 |
| 16 | 15 | 50 / 59 | 25 / 21 | 2 | 14 | 46 | 45 | 25 / 58 | 33 / 46 | 8 | 2 | 76 | 73 | 54 / 51 | 55 / 23 | 27 | 48 |
| 17 | 16 | 49 / 59 | 46 / 22 | 2 | 22 | 47 | 46 | 24 / 58 | 19 / 44 | 8 | 19 | 77 | 74 | 36 / 50 | 18 / 21 | 29 | 33 |
| 18 | 17 | 49 / 59 | 8 / 21 | 2 | 32 | 48 | 47 | 23 / 58 | 4 / 42 | 8 | 37 | 78 | 75 | 36 / 47 | 39 / 59 | 31 | 22 |
| 19 | 18 | 48 / 59 | 29 / 22 | 2 | 42 | 49 | 48 | 21 / 58 | 46 / 36 | 8 | 55 | 79 | 76 | 25 / 47 | 38 / 32 | 33 | 27 |
| 20 | 19 | 47 / 59 | 51 / 19 | 2 | 50 | 50 | 49 | 20 / 58 | 24 / 34 | 9 | 13 | 80 | 77 | 13 / 44 | 10 / 40 | 35 | 42 |
| 21 | 20 | 47 / 59 | 10 / 20 | 3 | 0 | 51 | 50 | 18 / 58 | 58 / 33 | 9 | 33 | 81 | 77 | 58 / 43 | 50 / 26 | 38 | 5 |
| 22 | 21 | 46 / 59 | 30 / 18 | 3 | 9 | 52 | 51 | 17 / 58 | 31 / 27 | 9 | 53 | 82 | 78 | 42 / 40 | 16 / 50 | 40 | 50 |
| 23 | 22 | 45 / 59 | 48 / 19 | 3 | 20 | 53 | 52 | 15 / 58 | 58 / 24 | 10 | 14 | 83 | 79 | 33 / 37 | 6 / 37 | 43 | 41 |
| 24 | 23 | 45 / 59 | 7 / 18 | 3 | 29 | 54 | 53 | 14 / 58 | 23 / 18 | 10 | 37 | 84 | 80 | 0 / 33 | 43 / 44 | 46 | 42 |
| 25 | 24 | 44 / 59 | 25 / 17 | 3 | 39 | 55 | 54 | 12 / 58 | 41 / 13 | 11 | 0 | 85 | 80 | 34 / 29 | 27 / 14 | 49 | 52 |
| 26 | 25 | 43 / 59 | 42 / 16 | 3 | 49 | 56 | 55 | 10 / 58 | 44 / 10 | 11 | 24 | 86 | 81 | 3 / 23 | 42 / 53 | 52 | 52 |
| 27 | 26 | 42 / 59 | 58 / 16 | 3 | 59 | 57 | 56 | 9 / 58 | 4 / 3 | 11 | 49 | 87 | 81 | 27 / 17 | 35 / 44 | 55 | 39 |
| 28 | 27 | 42 / 59 | 34 / 14 | 4 | 9 | 58 | 57 | 7 / 57 | 7 / 56 | 12 | 15 | 88 | 81 | 45 / 10 | 30 / 58 | 57 | 57 |
| 29 | 28 | 41 / 59 | 28 / 14 | 4 | 20 | 59 | 58 | 5 / 57 | 3 / 49 | 12 | 41 | 89 | 81 | 56 / 3 | 18 / 42 | 59 | 29 |
| 30 | 29 | 40 / 59 | 42 / 13 | 4 | 31 | 60 | 59 | 2 / 57 | 52 / 41 | 13 | 14 | 90 | 82 | 0 / 0 | 0 / 0 | 60 | 0 |

# 83

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 59 | 33 | 59 | 33 | 0 | 7 |
| 2 | 1 | 59 | 6 | 59 | 33 | 0 | 14 |
| 3 | 2 | 58 | 39 | 59 | 33 | 0 | 22 |
| 4 | 3 | 58 | 12 | 59 | 33 | 0 | 29 |
| 5 | 4 | 57 | 45 | 59 | 33 | 0 | 36 |
| 6 | 5 | 57 | 18 | 59 | 33 | 0 | 43 |
| 7 | 6 | 56 | 51 | 59 | 33 | 0 | 50 |
| 8 | 7 | 56 | 24 | 59 | 32 | 0 | 57 |
| 9 | 8 | 55 | 56 | 59 | 33 | 1 | 5 |
| 10 | 9 | 55 | 29 | 59 | 32 | 1 | 11 |
| 11 | 10 | 55 | 1 | 59 | 33 | 1 | 19 |
| 12 | 11 | 54 | 34 | 59 | 31 | 1 | 26 |
| 13 | 12 | 54 | 5 | 59 | 32 | 1 | 34 |
| 14 | 13 | 53 | 37 | 59 | 31 | 1 | 41 |
| 15 | 14 | 53 | 8 | 59 | 31 | 1 | 50 |
| 16 | 15 | 52 | 39 | 59 | 31 | 1 | 57 |
| 17 | 16 | 52 | 10 | 59 | 30 | 2 | 4 |
| 18 | 17 | 51 | 40 | 59 | 31 | 2 | 12 |
| 19 | 18 | 51 | 11 | 59 | 30 | 2 | 20 |
| 20 | 19 | 50 | 41 | 59 | 29 | 2 | 28 |
| 21 | 20 | 50 | 10 | 59 | 29 | 2 | 37 |
| 22 | 21 | 49 | 39 | 59 | 29 | 2 | 45 |
| 23 | 22 | 49 | 8 | 59 | 28 | 2 | 53 |
| 24 | 23 | 48 | 36 | 59 | 28 | 3 | 1 |
| 25 | 24 | 48 | 4 | 59 | 27 | 3 | 10 |
| 26 | 25 | 47 | 31 | 59 | 26 | 3 | 19 |
| 27 | 26 | 46 | 57 | 59 | 26 | 3 | 28 |
| 28 | 27 | 46 | 23 | 59 | 21 | 3 | 37 |
| 29 | 28 | 45 | 48 | 59 | 26 | 3 | 46 |
| 30 | 29 | 45 | 14 | 59 | 23 | 3 | 54 |
| 31 | 30 | 44 | 37 | 59 | 24 | 4 | 4 |
| 32 | 31 | 44 | 1 | 59 | 23 | 4 | 14 |
| 33 | 32 | 43 | 24 | 59 | 21 | 4 | 24 |
| 34 | 33 | 42 | 45 | 59 | 20 | 4 | 34 |
| 35 | 34 | 42 | 5 | 59 | 20 | 4 | 44 |
| 36 | 35 | 41 | 25 | 59 | 19 | 4 | 54 |
| 37 | 36 | 40 | 44 | 59 | 17 | 5 | 6 |
| 38 | 37 | 40 | 1 | 59 | 17 | 5 | 18 |
| 39 | 38 | 39 | 18 | 59 | 16 | 5 | 28 |
| 40 | 39 | 38 | 34 | 59 | 15 | 5 | 40 |
| 41 | 40 | 37 | 47 | 59 | 13 | 5 | 53 |
| 42 | 41 | 37 | 0 | 59 | 11 | 6 | 4 |
| 43 | 42 | 36 | 11 | 59 | 9 | 6 | 18 |
| 44 | 43 | 35 | 20 | 59 | 8 | 6 | 32 |
| 45 | 44 | 34 | 28 | 59 | 7 | 6 | 44 |
| 46 | 45 | 33 | 35 | 59 | 3 | 6 | 59 |
| 47 | 46 | 32 | 38 | 59 | 3 | 7 | 14 |
| 48 | 47 | 31 | 41 | 59 | 0 | 7 | 28 |
| 49 | 48 | 30 | 41 | 58 | 56 | 7 | 44 |
| 50 | 49 | 29 | 37 | 58 | 54 | 8 | 1 |
| 51 | 50 | 28 | 31 | 58 | 53 | 8 | 21 |
| 52 | 51 | 27 | 24 | 58 | 49 | 8 | 36 |
| 53 | 52 | 26 | 13 | 58 | 47 | 8 | 54 |
| 54 | 53 | 24 | 0 | 58 | 44 | 9 | 13 |
| 55 | 54 | 23 | 41 | 58 | 37 | 9 | 34 |
| 56 | 55 | 22 | 18 | 58 | 34 | 9 | 57 |
| 57 | 56 | 20 | 53 | 58 | 29 | 10 | 18 |
| 58 | 57 | 19 | 22 | 58 | 26 | 10 | 42 |
| 59 | 58 | 17 | 48 | 58 | 18 | 11 | 6 |
| 60 | 59 | 16 | 6 | 58 | 14 | 11 | 33 |
| 61 | 60 | 14 | 20 | 58 | 6 | 11 | 59 |
| 62 | 61 | 12 | 26 | 57 | 58 | 12 | 29 |
| 63 | 62 | 10 | 24 | 57 | 52 | 13 | 1 |
| 64 | 63 | 8 | 16 | 57 | 40 | 13 | 34 |
| 65 | 64 | 5 | 46 | 57 | 34 | 14 | 10 |
| 66 | 65 | 3 | 30 | 57 | 19 | 14 | 46 |
| 67 | 66 | 0 | 49 | 57 | 8 | 15 | 28 |
| 68 | 66 | 57 | 57 | 56 | 42 | 16 | 12 |
| 69 | 67 | 54 | 51 | 56 | 36 | 16 | 57 |
| 70 | 68 | 51 | 27 | 56 | 20 | 17 | 50 |
| 71 | 69 | 47 | 47 | 55 | 58 | 18 | 44 |
| 72 | 70 | 43 | 24 | 55 | 33 | 19 | 44 |
| 73 | 71 | 39 | 18 | 55 | 1 | 20 | 48 |
| 74 | 72 | 34 | 19 | 54 | 34 | 22 | 2 |
| 75 | 73 | 28 | 54 | 53 | 49 | 23 | 19 |
| 76 | 74 | 22 | 43 | 53 | 8 | 24 | 49 |
| 77 | 75 | 14 | 51 | 52 | 10 | 26 | 22 |
| 78 | 76 | 8 | 1 | 51 | 4 | 28 | 10 |
| 79 | 76 | 59 | 5 | 49 | 47 | 30 | 12 |
| 80 | 77 | 40 | 52 | 48 | 3 | 32 | 21 |
| 81 | 78 | 36 | 55 | 46 | 11 | 34 | 54 |
| 82 | 79 | 33 | 6 | 43 | 41 | 37 | 37 |
| 83 | 80 | 6 | 47 | 40 | 38 | 40 | 38 |
| 84 | 80 | 47 | 51 | 36 | 54 | 43 | 56 |
| 85 | 81 | 24 | 19 | 32 | 14 | 47 | 24 |
| 86 | 81 | 56 | 34 | 26 | 40 | 51 | 1 |
| 87 | 82 | 33 | 14 | 20 | 3 | 54 | 26 |
| 88 | 82 | 43 | 17 | 12 | 30 | 57 | 19 |
| 89 | 82 | 55 | 47 | 4 | 13 | 59 | 16 |
| 90 | 83 | 0 | 0 | 0 | 0 | 60 | 0 |

32

| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 59/59 | 40/41 | 0 | 6 |
| 2 | 1 | 59/59 | 21/40 | 0 | 12 |
| 3 | 2 | 59/59 | 1/40 | 0 | 18 |
| 4 | 3 | 58/59 | 41/40 | 0 | 24 |
| 5 | 4 | 58/59 | 21/40 | 0 | 30 |
| 6 | 5 | 58/59 | 1/40 | 0 | 36 |
| 7 | 6 | 57/59 | 41/40 | 0 | 43 |
| 8 | 7 | 57/59 | 21/40 | 0 | 49 |
| 9 | 8 | 57/59 | 1/39 | 0 | 54 |
| 10 | 9 | 56/59 | 40/40 | 1 | 1 |
| 11 | 10 | 56/59 | 20/40 | 1 | 7 |
| 12 | 11 | 56/59 | 0/40 | 1 | 14 |
| 13 | 12 | 55/59 | 40/38 | 1 | 20 |
| 14 | 13 | 55/59 | 18/40 | 1 | 27 |
| 15 | 14 | 54/59 | 58/38 | 1 | 32 |
| 16 | 15 | 54/59 | 36/39 | 1 | 39 |
| 17 | 16 | 54/59 | 14/37 | 1 | 45 |
| 18 | 17 | 53/59 | 52/39 | 1 | 52 |
| 19 | 18 | 53/59 | 21/38 | 1 | 58 |
| 20 | 19 | 53/59 | 9/38 | 2 | 6 |
| 21 | 20 | 52/59 | 47/37 | 2 | 12 |
| 22 | 21 | 52/59 | 24/37 | 2 | 19 |
| 23 | 22 | 52/59 | 1/36 | 2 | 26 |
| 24 | 23 | 51/59 | 37/37 | 2 | 34 |
| 25 | 24 | 51/59 | 14/36 | 2 | 41 |
| 26 | 25 | 50/59 | 50/35 | 2 | 48 |
| 27 | 26 | 50/59 | 21/34 | 2 | 55 |
| 28 | 27 | 49/59 | 59/35 | 3 | 4 |
| 29 | 28 | 49/59 | 34/34 | 3 | 10 |
| 30 | 29 | 49/59 | 8/34 | 3 | 19 |
| 31 | 30 | 48/59 | 42/33 | 3 | 27 |
| 32 | 31 | 48/59 | 14/33 | 3 | 34 |
| 33 | 32 | 47/59 | 48/31 | 3 | 43 |
| 34 | 33 | 47/59 | 19/31 | 3 | 52 |
| 35 | 34 | 46/59 | 50/30 | 4 | 1 |
| 36 | 35 | 46/59 | 20/30 | 4 | 10 |
| 37 | 36 | 45/59 | 50/29 | 4 | 19 |
| 38 | 37 | 45/59 | 19/27 | 4 | 28 |
| 39 | 38 | 44/59 | 46/28 | 4 | 39 |
| 40 | 39 | 44/59 | 14/26 | 4 | 48 |
| 41 | 40 | 43/59 | 40/25 | 4 | 59 |
| 42 | 41 | 43/59 | 5/24 | 5 | 9 |
| 43 | 42 | 42/59 | 29/23 | 5 | 20 |
| 44 | 43 | 41/59 | 52/21 | 5 | 31 |
| 45 | 44 | 41/59 | 13/21 | 5 | 43 |
| 46 | 45 | 40/59 | 34/18 | 5 | 55 |
| 47 | 46 | 39/59 | 52/17 | 6 | 8 |
| 48 | 47 | 39/59 | 9/16 | 6 | 21 |
| 49 | 48 | 38/59 | 24/15 | 6 | 35 |
| 50 | 49 | 37/59 | 38/13 | 6 | 49 |
| 51 | 50 | 36/59 | 51/9 | 7 | 4 |
| 52 | 51 | 36/59 | 0/7 | 7 | 18 |
| 53 | 52 | 35/59 | 7/6 | 7 | 34 |
| 54 | 53 | 34/59 | 13/2 | 7 | 51 |
| 55 | 54 | 33/59 | 17/0 | 8 | 8 |
| 56 | 55 | 32/58 | 17/56 | 8 | 27 |
| 57 | 56 | 31/58 | 11/53 | 8 | 46 |
| 58 | 57 | 30/58 | 4/50 | 9 | 6 |
| 59 | 58 | 28/58 | 44/44 | 9 | 27 |
| 60 | 59 | 27/58 | 38/41 | 9 | 50 |
| 61 | 60 | 26/58 | 19/36 | 10 | 14 |
| 62 | 61 | 24/58 | 44/30 | 10 | 38 |
| 63 | 62 | 23/58 | 24/25 | 11 | 7 |
| 64 | 63 | 21/58 | 40/16 | 11 | 34 |
| 65 | 64 | 20/58 | 6/10 | 12 | 5 |
| 66 | 65 | 18/58 | 16/1 | 12 | 38 |
| 67 | 66 | 16/57 | 17/52 | 13 | 12 |
| 68 | 67 | 14/57 | 9/39 | 13 | 51 |
| 69 | 68 | 11/57 | 48/29 | 14 | 32 |
| 70 | 69 | 9/57 | 17/14 | [illegible] | 17 |
| 71 | 70 | 6/56 | 31/58 | 16 | 4 |
| 72 | 71 | 3/56 | 29/37 | 16 | 58 |
| 73 | 72 | 0/56 | 6/14 | 17 | 57 |
| 74 | 72 | 56/55 | 21/52 | 19 | 3 |
| 75 | 73 | 52/55 | 33/19 | 20 | 11 |
| 76 | 74 | 47/54 | 33/42 | 21 | 31 |
| 77 | 75 | 42/53 | 14/57 | 23 | 0 |
| 78 | 76 | 36/53 | 11/6 | 24 | 41 |
| 79 | 77 | 29/51 | 27/56 | 26 | 31 |
| 80 | 78 | 21/50 | 33/37 | 28 | 40 |
| 81 | 79 | 11/48 | 40/53 | 31 | 4 |
| 82 | 80 | 0/46 | 23/42 | 33 | 44 |
| 83 | 80 | 47/43 | 24/50 | 36 | 54 |
| 84 | 81 | 31/40 | 21/33 | 40 | 33 |
| 85 | 82 | 11/35 | 44/51 | 44 | 17 |
| 86 | 82 | 47/30 | 35/5 | 48 | 25 |
| 87 | 83 | 17/22 | 40/56 | 52 | 36 |
| 88 | 83 | 40/14 | 36/27 | 56 | 33 |
| 89 | 83 | 55/4 | 3/57 | 59 | 1 |
| 90 | 84 | 0/0 | 0/0 | 60 | 0 |

| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 59<br>59 | 46<br>41 | 0 | 5 |
| 2 | 1 | 59<br>59 | 33<br>46 | 0 | 10 |
| 3 | 2 | 59<br>59 | 19<br>46 | 0 | 15 |
| 4 | 3 | 59<br>59 | 5<br>46 | 0 | 20 |
| 5 | 4 | 58<br>59 | 51<br>46 | 0 | 25 |
| 6 | 5 | 58<br>59 | 37<br>47 | 0 | 30 |
| 7 | 6 | 58<br>59 | 24<br>46 | 0 | 34 |
| 8 | 7 | 58<br>59 | 10<br>45 | 0 | 39 |
| 9 | 8 | 57<br>59 | 55<br>46 | 0 | 45 |
| 10 | 9 | 57<br>59 | 41<br>46 | 0 | 50 |
| 11 | 10 | 57<br>59 | 27<br>47 | 0 | 55 |
| 12 | 11 | 57<br>59 | 14<br>46 | 0 | 59 |
| 13 | 12 | 57<br>59 | 0<br>45 | 1 | 4 |
| 14 | 13 | 56<br>59 | 46<br>45 | 1 | 10 |
| 15 | 14 | 56<br>59 | 30<br>45 | 1 | 16 |
| 16 | 15 | 56<br>59 | 14<br>45 | 1 | 21 |
| 17 | 16 | 56<br>59 | 0<br>45 | 1 | 26 |
| 18 | 17 | 55<br>59 | 45<br>44 | 1 | 32 |
| 19 | 18 | 55<br>59 | 29<br>46 | 1 | 38 |
| 20 | 19 | 55<br>59 | 15<br>44 | 1 | 43 |
| 21 | 20 | 54<br>59 | 59<br>44 | 1 | 49 |
| 22 | 21 | 54<br>59 | 43<br>34 | 1 | 54 |
| 23 | 22 | 54<br>59 | 27<br>44 | 2 | 0 |
| 24 | 23 | 54<br>59 | 11<br>44 | 2 | 5 |
| 25 | 24 | 53<br>59 | 55<br>43 | 2 | 11 |
| 26 | 25 | 53<br>59 | 38<br>[illegible] | 2 | 17 |
| 27 | 26 | 53<br>59 | 20<br>43 | 2 | 24 |
| 28 | 27 | 53<br>59 | 3<br>41 | 2 | 30 |
| 29 | 28 | 52<br>59 | 44<br>43 | 2 | 37 |
| 30 | 29 | 52<br>59 | 27<br>42 | 2 | 43 |
| 31 | 30 | 52<br>59 | 9<br>40 | 2 | 49 |
| 32 | 31 | 51<br>59 | 49<br>42 | 2 | 57 |
| 33 | 32 | 51<br>59 | 31<br>40 | 3 | 3 |
| 34 | 33 | 51<br>59 | 11<br>40 | 3 | 10 |
| 35 | 34 | 50<br>59 | 51<br>39 | 3 | 17 |
| 36 | 35 | 50<br>59 | 30<br>39 | 3 | 24 |
| 37 | 36 | 50<br>59 | 9<br>38 | 3 | 33 |
| 38 | 37 | 49<br>59 | 47<br>38 | 3 | 41 |
| 39 | 38 | 49<br>59 | 25<br>37 | 3 | 48 |
| 40 | 39 | 49<br>59 | 2<br>37 | 3 | 55 |
| 41 | 40 | 48<br>59 | 39<br>36 | 4 | 5 |
| 42 | 41 | 48<br>59 | 14<br>36 | 4 | 14 |
| 43 | 42 | 47<br>59 | 50<br>33 | 4 | 22 |
| 44 | 43 | 47<br>59 | 23<br>33 | 4 | 33 |
| 45 | 44 | 46<br>59 | 56<br>33 | 4 | 42 |
| 46 | 45 | 46<br>59 | 29<br>31 | 4 | 52 |
| 47 | 46 | 46<br>59 | 0<br>30 | 5 | 2 |
| 48 | 47 | 45<br>59 | 30<br>30 | 5 | 12 |
| 49 | 48 | 45<br>59 | 0<br>27 | 5 | 23 |
| 50 | 49 | 44<br>59 | 27<br>28 | 5 | 34 |
| 51 | 50 | 43<br>59 | 55<br>23 | 5 | 47 |
| 52 | 51 | 43<br>59 | 18<br>23 | 6 | 0 |
| 53 | 52 | 42<br>59 | 41<br>23 | 6 | 12 |
| 54 | 53 | 42<br>59 | 4<br>19 | 6 | 26 |
| 55 | 54 | 41<br>59 | 23<br>19 | 6 | 41 |
| 56 | 55 | 40<br>59 | 42<br>15 | 6 | 56 |
| 57 | 56 | 39<br>59 | 57<br>13 | 7 | 11 |
| 58 | 57 | 39<br>59 | 10<br>11 | 7 | 27 |
| 59 | 58 | 38<br>59 | 21<br>7 | 7 | 46 |
| 60 | 59 | 37<br>59 | 28<br>5 | 8 | 4 |
| 61 | 60 | 36<br>59 | 33<br>0 | 8 | 25 |
| 62 | 61 | 37<br>58 | 33<br>59 | 8 | 46 |
| 63 | 62 | 34<br>58 | 32<br>52 | 9 | 7 |
| 64 | 63 | 33<br>58 | 34<br>41 | 9 | 30 |
| 65 | 64 | 33<br>58 | 11<br>43 | 9 | 58 |
| 66 | 65 | 30<br>58 | 54<br>35 | 10 | 34 |
| 67 | 66 | 29<br>58 | 29<br>31 | 10 | 54 |
| 68 | 67 | 28<br>58 | 0<br>20 | 11 | 26 |
| 69 | 68 | 26<br>58 | 20<br>14 | 12 | 1 |
| 70 | 69 | 34<br>58 | 34<br>1 | 12 | 38 |
| 71 | 70 | 33<br>57 | 35<br>52 | 13 | 20 |
| 72 | 71 | 20<br>57 | 27<br>36 | 14 | 5 |
| 73 | 72 | 18<br>57 | 3<br>21 | 14 | 55 |
| 74 | 73 | 14<br>57 | 24<br>0 | 15 | 49 |
| 75 | 74 | 12<br>56 | 24<br>39 | 16 | 51 |
| 76 | 75 | 9<br>56 | 3<br>10 | 18 | 0 |
| 77 | 76 | 5<br>55 | 14<br>38 | 19 | 17 |
| 78 | 77 | 0<br>54 | 52<br>56 | 20 | 44 |
| 79 | 77 | 55<br>54 | 48<br>5 | 22 | 25 |
| 80 | 78 | 49<br>53 | 53<br>1 | 24 | 22 |
| 81 | 79 | 42<br>51 | 59<br>33 | 26 | 34 |
| 82 | 80 | 34<br>49 | 27<br>52 | 29 | 15 |
| 83 | 81 | 24<br>47 | 19<br>25 | 32 | 15 |
| 84 | 82 | 11<br>44 | 44<br>17 | 35 | 51 |
| 85 | 82 | 56<br>39 | 1<br>55 | 39 | 59 |
| 86 | 83 | 36<br>34 | 0<br>16 | 44 | 46 |
| 87 | 84 | 10<br>26 | 16<br>23 | 49 | 49 |
| 88 | 84 | 36<br>17 | 29<br>5 | 54 | 46 |
| 89 | 84 | 54<br>5 | 4<br>56 | 58 | 35 |
| 90 | 85 | 0<br>0 | 0<br>0 | 60 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 59 / 59 | 51 / 52 | 0 | 4 |
| 2 | 1 | 59 / 59 | 43 / 51 | 0 | 7 |
| 3 | 2 | 59 / 59 | 34 / 51 | 0 | 11 |
| 4 | 3 | 59 / 59 | 25 / 51 | 0 | 15 |
| 5 | 4 | 59 / 59 | 16 / 51 | 0 | 19 |
| 6 | 5 | 59 / 59 | 7 / 51 | 0 | 23 |
| 7 | 6 | 58 / 59 | 58 / 51 | 0 | 27 |
| 8 | 7 | 58 / 59 | 49 / 51 | 0 | 31 |
| 9 | 8 | 58 / 59 | 40 / 51 | 0 | 35 |
| 10 | 9 | 58 / 59 | 31 / 51 | 0 | 39 |
| 11 | 10 | 58 / 59 | 22 / 51 | 0 | 43 |
| 12 | 11 | 58 / 59 | 13 / 51 | 0 | 47 |
| 13 | 12 | 58 / 59 | 4 / 51 | 0 | 51 |
| 14 | 13 | 57 / 59 | 55 / 51 | 0 | 55 |
| 15 | 14 | 57 / 59 | 46 / 50 | 0 | 58 |
| 16 | 15 | 57 / 59 | 36 / 50 | 1 | 3 |
| 17 | 16 | 57 / 59 | 26 / 51 | 1 | 7 |
| 18 | 17 | 57 / 59 | 17 / 50 | 1 | 11 |
| 19 | 18 | 57 / 59 | 7 / 51 | 1 | 15 |
| 20 | 19 | 56 / 59 | 58 / 50 | 1 | 19 |
| 21 | 20 | 56 / 59 | 48 / 49 | 1 | 24 |
| 22 | 21 | 56 / 59 | 37 / 50 | 1 | 29 |
| 23 | 22 | 56 / 59 | 27 / 49 | 1 | 33 |
| 24 | 23 | 56 / 59 | 16 / 50 | 1 | 38 |
| 25 | 24 | 56 / 59 | 6 / 49 | 1 | 43 |
| 26 | 25 | 55 / 59 | 55 / 49 | 1 | 47 |
| 27 | 26 | 55 / 59 | 44 / 49 | 1 | 52 |
| 28 | 27 | 55 / 59 | 33 / 48 | 1 | 56 |
| 29 | 28 | 55 / 59 | 21 / 49 | 2 | 2 |
| 30 | 29 | 55 / 59 | 10 / 48 | 2 | 7 |
| 31 | 30 | 54 / 59 | 58 / 48 | 2 | 12 |
| 32 | 31 | 54 / 59 | 46 / 48 | 2 | 17 |
| 33 | 32 | 54 / 59 | 34 / 47 | 2 | 23 |
| 34 | 33 | 54 / 59 | 21 / 47 | 2 | 29 |
| 35 | 34 | 54 / 59 | 8 / 46 | 2 | 34 |
| 36 | 35 | 53 / 59 | 54 / 48 | 2 | 40 |
| 37 | 36 | 53 / 59 | 42 / 46 | 2 | 45 |
| 38 | 37 | 53 / 59 | 28 / 45 | 2 | 50 |
| 39 | 38 | 53 / 59 | 13 / 44 | 2 | 58 |
| 40 | 39 | 52 / 59 | 57 / 47 | 3 | 4 |
| 41 | 40 | 52 / 59 | 44 / 44 | 3 | 10 |
| 42 | 41 | 52 / 59 | 28 / 44 | 3 | 17 |
| 43 | 42 | 52 / 59 | 12 / 43 | 3 | 25 |
| 44 | 43 | 51 / 59 | 55 / 43 | 3 | 32 |
| 45 | 44 | 51 / 59 | 38 / 43 | 3 | 39 |
| 46 | 45 | 51 / 59 | 21 / 41 | 3 | 46 |
| 47 | 46 | 51 / 59 | 2 / 40 | 3 | 55 |
| 48 | 47 | 50 / 59 | 42 / 41 | 4 | 4 |
| 49 | 48 | 50 / 59 | 22 / 39 | 4 | 12 |
| 50 | 49 | 50 / 59 | 2 / 40 | 4 | 21 |
| 51 | 50 | 49 / 59 | 42 / 36 | 4 | 30 |
| 52 | 51 | 49 / 59 | 18 / 35 | 4 | 41 |
| 53 | 52 | 48 / 59 | 53 / 37 | 4 | 51 |
| 54 | 53 | 48 / 59 | 30 / 34 | 5 | 2 |
| 55 | 54 | 48 / 59 | 4 / 34 | 5 | 13 |
| 56 | 55 | 47 / 59 | 38 / 30 | 5 | 23 |
| 57 | 56 | 47 / 59 | 8 / 29 | 5 | 37 |
| 58 | 57 | 46 / 59 | 37 / 30 | 5 | 52 |
| 59 | 58 | 46 / 59 | 7 / 25 | 6 | 3 |
| 60 | 59 | 45 / 59 | 32 / 26 | 6 | 18 |
| 61 | 60 | 44 / 59 | 58 / 21 | 6 | 34 |
| 62 | 61 | 44 / 59 | 19 / 20 | 6 | 50 |
| 63 | 62 | 43 / 59 | 39 / 16 | 7 | 9 |
| 64 | 63 | 42 / 59 | 55 / 12 | 7 | 27 |
| 65 | 64 | 42 / 59 | 9 / 9 | 7 | 48 |
| 66 | 65 | 41 / 59 | 18 / 5 | 8 | 9 |
| 67 | 66 | 40 / 59 | 23 / 3 | 8 | 34 |
| 68 | 67 | 39 / 58 | 26 / 55 | 8 | 57 |
| 69 | 68 | 38 / 58 | 21 / 51 | 9 | 26 |
| 70 | 69 | 37 / 58 | 12 / 43 | 9 | 55 |
| 71 | 70 | 35 / 58 | 55 / 37 | 10 | 28 |
| 72 | 71 | 34 / 57 | 32 / 26 | 11 | 4 |
| 73 | 72 | 33 / 58 | 48 / 15 | 11 | 44 |
| 74 | 73 | 31 / 58 | 13 / 2 | 12 | 30 |
| 75 | 74 | 29 / 57 | 15 / 48 | 13 | 18 |
| 76 | 75 | 27 / 57 | 3 / 28 | 14 | 16 |
| 77 | 76 | 24 / 57 | 31 / 5 | 15 | 20 |
| 78 | 77 | 21 / 56 | 36 / 37 | 16 | 34 |
| 79 | 78 | 18 / 56 | 13 / 2 | 17 | 48 |
| 80 | 79 | 12 / 55 | 55 / 13 | 19 | 36 |
| 81 | 80 | 9 / 52 | 28 / 12 | 21 | 33 |
| 82 | 81 | 3 / 52 | 43 / 52 | 23 | 43 |
| 83 | 82 | 46 / 51 | 34 / 1 | 26 | 40 |
| 84 | 83 | 47 / 48 | 35 / 24 | 30 | 5 |
| 85 | 84 | 36 / 44 | 0 / 46 | 34 | 16 |
| 86 | 85 | 20 / 39 | 46 / 19 | 39 | 19 |
| 87 | 86 | 0 / 31 | 5 / 40 | 44 | 27 |
| 88 | 87 | 31 / 20 | 44 / 42 | 51 | 49 |
| 89 | 88 | 42 / 7 | 39 / 21 | 57 | 39 |
| 90 | 89 | 0 / 0 | 0 / 0 | 60 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 59 55 | 59 55 | 0 | 3 | | |
| 2 | 1 | 59 50 | 59 55 | 0 | 6 | | |
| 3 | 2 | 59 45 | 59 55 | 0 | 9 | | |
| 4 | 3 | 59 40 | 59 55 | 0 | 11 | | |
| 5 | 4 | 59 35 | 59 55 | 0 | 14 | | |
| 6 | 5 | 59 30 | 59 55 | 0 | 17 | | |
| 7 | 6 | 59 25 | 59 55 | 0 | 19 | | |
| 8 | 7 | 59 20 | 59 55 | 0 | 22 | | |
| 9 | 8 | 59 15 | 59 55 | 0 | 25 | | |
| 10 | 9 | 59 10 | 59 55 | 0 | 27 | | |
| 11 | 10 | 59 5 | 59 55 | 0 | 30 | | |
| 12 | 11 | 59 0 | 59 55 | 0 | 34 | | |
| 13 | 12 | 58 55 | 59 55 | 0 | 36 | | |
| 14 | 13 | 58 50 | 59 54 | 0 | 39 | | |
| 15 | 14 | 58 44 | 59 55 | 0 | 42 | | |
| 16 | 15 | 58 39 | 59 54 | 0 | 45 | | |
| 17 | 16 | 58 33 | 59 55 | 0 | 48 | | |
| 18 | 17 | 58 28 | 59 54 | 0 | 51 | | |
| 19 | 18 | 58 22 | 59 55 | 0 | 54 | | |
| 20 | 19 | 58 17 | 59 55 | 0 | 57 | | |
| 21 | 20 | 58 12 | 59 54 | 1 | 0 | | |
| 22 | 21 | 58 6 | 59 54 | 1 | 3 | | |
| 23 | 22 | 58 0 | 59 54 | 1 | 7 | | |
| 24 | 23 | 57 54 | 59 55 | 1 | 10 | | |
| 25 | 24 | 57 49 | 59 53 | 1 | 12 | | |
| 26 | 25 | 57 42 | 59 54 | 1 | 17 | | |
| 27 | 26 | 57 36 | 59 53 | 1 | 20 | | |
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| 34 | 33 | 56 50 | 59 52 | 1 | 45 | | |
| 35 | 34 | 56 42 | 59 52 | 1 | 50 | | |
| 36 | 35 | 56 34 | 59 53 | 1 | 54 | | |
| 37 | 36 | 56 27 | 59 52 | 1 | 59 | | |
| 38 | 37 | 56 19 | 59 52 | 2 | 3 | | |
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| 41 | 40 | 55 54 | 59 51 | 2 | 17 | | |
| 42 | 41 | 55 45 | 59 52 | 2 | 22 | | |
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| 44 | 43 | 55 27 | 59 50 | 2 | 32 | | |
| 45 | 44 | 55 17 | 59 50 | 2 | 36 | | |
| 46 | 45 | 55 7 | 59 50 | 2 | 43 | | |
| 47 | 46 | 54 57 | 59 49 | 2 | 48 | | |
| 48 | 47 | 54 46 | 59 49 | 2 | 53 | | |
| 49 | 48 | 54 35 | 59 48 | 3 | 0 | | |
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| 54 | 53 | 53 32 | 59 45 | 3 | 35 | | |
| 55 | 54 | 53 17 | 59 44 | 3 | 44 | | |
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| 58 | 57 | 52 29 | 59 41 | 4 | 11 | | |
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| 62 | 61 | 51 9 | 59 39 | 4 | 55 | | |
| 63 | 62 | 50 44 | 59 34 | 5 | 7 | | |
| 64 | 63 | 50 22 | 59 35 | 5 | 20 | | |
| 65 | 64 | 49 57 | 59 30 | 5 | 35 | | |
| 66 | 65 | 49 37 | 59 30 | 5 | 51 | | |
| 67 | 66 | 48 57 | 59 26 | 6 | 8 | | |
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| 71 | 70 | 46 33 | 59 13 | 7 | 33 | | |
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| 73 | 72 | 44 42 | 59 1 | 8 | 28 | | |
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| 78 | 77 | 38 10 | 58 1 | 12 | 3 | | |
| 79 | 78 | 36 11 | 57 40 | 13 | 7 | | |
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| 82 | 81 | 27 35 | 55 39 | 17 | 45 | | |
| 83 | 82 | 23 14 | 54 25 | 20 | 3 | | |
| 84 | 83 | 17 40 | 52 36 | 22 | 56 | | |
| 85 | 84 | 10 16 | 49 49 | 26 | 43 | | |
| 86 | 85 | 0 9 | 45 27 | 31 | 40 | | |
| 87 | 86 | 45 23 | 38 12 | 38 | 12 | | |
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| 8 | 7 | 59 42 | 59 58 | 0 | 13 |
| 9 | 8 | 59 40 | 59 57 | 0 | 16 |
| 10 | 9 | 59 37 | 59 58 | 0 | 17 |
| 11 | 10 | 59 35 | 59 59 | 0 | 18 |
| 12 | 11 | 59 34 | 59 57 | 0 | 20 |
| 13 | 12 | 59 31 | 59 58 | 0 | 22 |
| 14 | 13 | 59 29 | 59 57 | 0 | 24 |
| 15 | 14 | 59 26 | 59 58 | 0 | 26 |
| 16 | 15 | 59 24 | 59 57 | 0 | 27 |
| 17 | 16 | 59 21 | 59 58 | 0 | 29 |
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| 20 | 19 | 59 14 | 59 58 | 0 | 36 |
| 21 | 20 | 59 12 | 59 57 | 0 | 37 |
| 22 | 21 | 59 9 | 59 58 | 0 | 40 |
| 23 | 22 | 59 7 | 59 57 | 0 | 39 |
| 24 | 23 | 59 4 | 59 57 | 0 | 41 |
| 25 | 24 | 59 1 | 59 58 | 0 | 44 |
| 26 | 25 | 58 59 | 59 57 | 0 | 46 |
| 27 | 26 | 58 56 | 59 57 | 0 | 48 |
| 28 | 27 | 58 53 | 59 56 | 0 | 50 |
| 29 | 28 | 58 49 | 59 59 | 0 | 53 |
| 30 | 29 | 58 46 | 59 56 | 0 | 54 |
| 31 | 30 | 58 44 | 59 57 | 0 | 57 |
| 32 | 31 | 58 41 | 59 58 | 0 | 59 |
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| 34 | 33 | 58 34 | 57 57 | 1 | 4 |
| 35 | 34 | 58 32 | 59 56 | 1 | 6 |
| 36 | 35 | 58 28 | 59 58 | 1 | 8 |
| 37 | 36 | 58 26 | 59 56 | 1 | 11 |
| 38 | 37 | 58 22 | 59 56 | 1 | 13 |
| 39 | 38 | 58 18 | 59 56 | 1 | 16 |
| 40 | 39 | 58 14 | 59 57 | 1 | 19 |
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| 42 | 41 | 58 7 | 59 56 | 1 | 24 |
| 43 | 42 | 58 3 | 59 56 | 1 | 28 |
| 44 | 43 | 57 59 | 59 54 | 1 | 31 |
| 45 | 44 | 57 53 | 59 57 | 1 | 35 |
| 46 | 45 | 57 50 | 59 55 | 1 | 38 |
| 47 | 46 | 57 44 | 59 54 | 1 | 41 |
| 48 | 47 | 57 39 | 59 56 | 1 | 45 |
| 49 | 48 | 57 35 | 59 55 | 1 | 49 |
| 50 | 49 | 57 30 | 59 55 | 1 | 52 |
| 51 | 50 | 57 25 | 59 54 | 1 | 57 |
| 52 | 51 | 57 19 | 59 54 | 2 | 1 |
| 53 | 52 | 57 13 | 59 54 | 2 | 5 |
| 54 | 53 | 57 7 | 59 54 | 2 | 10 |
| 55 | 54 | 57 1 | 59 54 | 2 | 14 |
| 56 | 55 | 56 55 | 59 51 | 2 | 19 |
| 57 | 56 | 56 46 | 59 54 | 2 | 24 |
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| 59 | 58 | 56 31 | 59 51 | 2 | 37 |
| 60 | 59 | 56 23 | 59 52 | 2 | 43 |
| 61 | 60 | 56 14 | 59 50 | 2 | 48 |
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| 66 | 65 | 55 18 | 59 47 | 3 | 31 |
| 67 | 66 | 55 5 | 59 44 | 3 | 41 |
| 68 | 67 | 54 49 | 59 46 | 3 | 43 |
| 69 | 68 | 54 35 | 59 41 | 4 | 5 |
| 70 | 69 | 54 16 | 59 40 | 4 | 18 |
| 71 | 70 | 53 56 | 59 38 | 4 | 30 |
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| 73 | 72 | 53 10 | 59 34 | 5 | 6 |
| 74 | 73 | 52 44 | 59 28 | 5 | 26 |
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| 76 | 75 | 51 39 | 59 20 | 6 | 16 |
| 77 | 76 | 50 59 | 59 14 | 6 | 44 |
| 78 | 77 | 50 13 | 59 5 | 7 | 20 |
| 79 | 78 | 49 18 | 58 57 | 7 | 59 |
| 80 | 79 | 48 14 | 58 41 | 8 | 47 |
| 81 | 80 | 46 56 | 58 24 | 9 | 46 |
| 82 | 81 | 45 20 | 57 57 | 10 | 58 |
| 83 | 82 | 43 17 | 57 19 | 12 | 30 |
| 84 | 83 | 40 36 | 56 23 | 14 | 27 |
| 85 | 84 | 35 59 | 54 46 | 17 | 5 |
| 86 | 85 | 31 54 | 51 59 | 20 | 42 |
| 87 | 86 | 23 44 | 46 37 | 26 | 34 |
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| 6 | 5 / 0 | 59 / 59 | 57 / 59 | 0 | 3 |
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| 12 | 11 / 0 | 59 / 59 | 54 / 59 | 0 | 6 |
| 13 | 12 / 1 | 59 / 0 | 53 / 0 | 0 | 7 |
| 14 | 13 / 0 | 59 / 59 | 53 / 59 | 0 | 7 |
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| 16 | 14 / 0 | 59 / 59 | 51 / 59 | 0 | 9 |
| 17 | 16 / 0 | 59 / 59 | 50 / 59 | 0 | 10 |
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| 19 | 18 / 1 | 59 / 0 | 48 / 1 | 0 | 12 |
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| 21 | 20 / 1 | 59 / 0 | 49 / 0 | 0 | 11 |
| 22 | 21 / 0 | 59 / 59 | 49 / 57 | 0 | 11 |
| 23 | 22 / 0 | 59 / 59 | 46 / 59 | 0 | 14 |
| 24 | 23 / 1 | 59 / 0 | 45 / 1 | 0 | 15 |
| 25 | 24 / 0 | 59 / 59 | 46 / 59 | 0 | 14 |
| 26 | 25 / 0 | 59 / 59 | 45 / 59 | 0 | 15 |
| 27 | 26 / 0 | 59 / 59 | 44 / 59 | 0 | 16 |
| 28 | 27 / 0 | 59 / 59 | 43 / 59 | 0 | 17 |
| 29 | 28 / 1 | 59 / 0 | 42 / 0 | 0 | 18 |
| 30 | 29 / 0 | 59 / 59 | 42 / 59 | 0 | 18 |
| 31 | 30 / 0 | 59 / 59 | 41 / 59 | 0 | 18 |
| 32 | 31 / 1 | 59 / 0 | 40 / 0 | 0 | 20 |
| 33 | 32 / 0 | 59 / 59 | 40 / 59 | 0 | 24 |
| 34 | 33 / 0 | 59 / 59 | 39 / 59 | 0 | 21 |
| 35 | 34 / 0 | 59 / 59 | 38 / 58 | 0 | 22 |
| 36 | 35 / 1 | 59 / 0 | 36 / 1 | 0 | 24 |
| 37 | 36 / 0 | 59 / 59 | 37 / 58 | 0 | 23 |
| 38 | 37 / 0 | 59 / 59 | 35 / 59 | 0 | 25 |
| 39 | 38 / 0 | 59 / 59 | 34 / 59 | 0 | 26 |
| 40 | 39 / 1 | 59 / 0 | 33 / 0 | 0 | 27 |
| 41 | 40 / 0 | 59 / 59 | 33 / 58 | 0 | 27 |
| 42 | 41 / 1 | 59 / 0 | 31 / 0 | 0 | 29 |
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| 44 | 43 / 0 | 59 / 59 | 30 / 58 | 0 | 30 |
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| 46 | 45 / 0 | 59 / 59 | 28 / 58 | 0 | 32 |
| 47 | 46 / 0 | 59 / 59 | 26 / 58 | 0 | 34 |
| 48 | 47 / 1 | 59 / 0 | 24 / 0 | 0 | 36 |
| 49 | 48 / 0 | 59 / 59 | 24 / 58 | 0 | 36 |
| 50 | 49 / 1 | 59 / 0 | 22 / 0 | 0 | 38 |
| 51 | 50 | 59 / 59 | 22 / 58 | 0 | 38 |
| 52 | 51 | 59 / 59 | 20 / 58 | 0 | 40 |
| 53 | 52 | 59 / 59 | 18 / 59 | 0 | 42 |
| 54 | 53 | 59 / 59 | 17 / 58 | 0 | 43 |
| 55 | 54 | 59 / 59 | 14 / 59 | 0 | 45 |
| 56 | 55 | 59 / 59 | 12 / 57 | 0 | 46 |
| 57 | 56 | 59 / 59 | 11 / 59 | 0 | 49 |
| 58 | 57 | 59 / 59 | 10 / 58 | 0 | 50 |
| 59 | 58 | 59 / 59 | 8 / 57 | 0 | 52 |
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| 66 | 65 | 58 / 59 | 49 / 57 | 1 | 11 |
| 67 | 66 | 58 / 59 | 46 / 56 | 1 | 14 |
| 68 | 67 | 58 / 59 | 42 / 58 | 1 | 18 |
| 69 | 68 | 58 / 59 | 40 / 54 | 1 | 20 |
| 70 | 69 | 58 / 59 | 34 / 53 | 1 | 26 |
| 71 | 70 | 58 / 59 | 27 / 56 | 1 | 33 |
| 72 | 71 | 58 / 59 | 23 / 53 | 1 | 37 |
| 73 | 72 | 58 / 59 | 16 / 53 | 1 | 44 |
| 74 | 73 | 58 / 59 | 10 / 13 | 1 | 50 |
| 75 | 74 | 58 / 59 | 3 / 52 | 1 | 57 |
| 76 | 75 | 57 / 59 | 55 / 49 | 2 | 5 |
| 77 | 76 | 57 / 59 | 44 / 49 | 2 | 16 |
| 78 | 77 | 57 / 59 | 33 / 44 | 2 | 27 |
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| 80 | 79 | 57 / 59 | 2 / 40 | 2 | 58 |
| 81 | 80 | 56 / 59 | 42 / 36 | 3 | 18 |
| 82 | 81 | 56 / 59 | 18 / 29 | 3 | 42 |
| 83 | 82 | 55 / 19 | 47 / 16 | 4 | 13 |
| 84 | 83 | 55 / 59 | 3 / 1 | 4 | 57 |
| 85 | 84 | 54 / 58 | 4 / 34 | 5 | 46 |
| 86 | 85 | 52 / 51 | 39 / 39 | 7 | 21 |
| 87 | 86 | 50 / 55 | 58 / 36 | 9 | 42 |
| 88 | 87 | 45 / 49 | 54 / 10 | 14 | 6 |
| 89 | 88 | 35 / 24 | 4 / 56 | 24 | 56 |
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|---|---|---|---|---|---|---|---|---|---|
| Toletum | 364 | 4 | 29 | 14 | 48 | 29 | 29 | | Quantitas anni secundum Alfonsum |
| Septa | 364 | | 12 | 33 | 9 | 41 | 2 | 32 | Quantitas anni in minuta dierum reducta |
| Corduba | 1 7 0 2 0 1 4 6 3 3 9 2 6 2 | | | | | | | | Ergo quantitas anni in minuta dierum reducta in sexta |
| Hungaria | 12 7 8 3 6 2 1 6 2 0 9 6 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | | | | | | 360 signum reductio ad 12 |
| Civitas Regis Francie / Insula Sicile / Castigo | Divise 360 signum in duodecimus dividatur per quantitatem anni reductam in sexta sc. 1 7 0 et tunc quod exeunt sunt ... per residuo quod remanserit post totalem divisionem addatur unitas ad proveniens ... | | | | | | | | |
| Armenia | 2 4 9 8 6 3 1 8 3 3 4 | | | | | | | | Exivit per 60 dividendum et est motus unius diei in ... |
| | 6 4 2 3 3 11 | | | | | | | | |
| | 24 18 37 19 8 49 | | | | | | | | Residuum |
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| | 0 0 49 8 19 37 18 24 | | | | | | | | Motus ☉ in una die quae divisa per 24 habet quantitatem motus ☉ in una hora |

19 56

# Incipiunt table resolute de medijs et veris motibus planetarum

| Anni collecti | Tabula augis et stellarum fixarum | | | | | Tabula accessus et recessus octave sphere | | | | | Tabula medii motus solis veneris et mercurii | | | | | Medius motus lunae | | | | | Medius motus argumenti lune | | | | | Medius argumenti latitudinis et lune | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | G | M | 2 | 3 | S | G | M | 2 | 3 | S | G | M | 2 | 3 | S | G | M | 2 | 3 | S | G | M | 2 | 3 | S | G | M | 2 | 3 |
| 1428 | 0 | 10 | 20 | 29 | 9 | 2 | 12 | 38 | 47 | 18 | 9 | 18 | 46 | 56 | 45 | 7 | 16 | 24 | 12 | 7 | 5 | 5 | 42 | 8 | 59 | 7 | 8 | 3 | 25 | 25 |
| 1448 | 0 | 10 | 38 | 18 | 8 | 2 | 13 | 40 | [illegible] | 50 | 9 | 18 | 57 | 45 | 44 | 11 | 29 | 51 | 59 | 40 | 6 | 14 | 26 | 34 | 20 | 0 | 18 | 27 | 4 | 11 |
| 1468 | 0 | 10 | 47 | 7 | 6 | 2 | 14 | 42 | 23 | 41 | 9 | 19 | 4 | 34 | 43 | 4 | 13 | 31 | 47 | 14 | 7 | 25 | 11 | 1 | 40 | 5 | 28 | 50 | 42 | 51 |
| 1488 | 0 | 10 | 57 | 56 | [illegible] | 2 | 14 | 44 | 6 | 33 | 9 | 19 | 13 | 23 | [illegible] | 9 | 27 | 5 | 34 | 45 | 9 | 4 | 54 | 28 | 0 | 11 | 9 | 14 | 21 | 43 |
| 1508 | 0 | 11 | 4 | 47 | 4 | 2 | 16 | 41 | 49 | 24 | 9 | 19 | 23 | 12 | [illegible] | 1 | 10 | 39 | 22 | 22 | 10 | 14 | 39 | 54 | 20 | 4 | 19 | 38 | 0 | 29 |
| 1528 | 0 | 11 | [illegible] | 34 | 4 | 2 | 17 | 41 | 32 | 14 | 0 | 19 | 21 | 2 | [illegible] | 5 | [illegible] | 13 | 9 | 55 | 11 | 24 | 24 | 20 | 41 | 10 | 0 | 1 | 39 | 15 |
| 1548 | 0 | 11 | 22 | 23 | 3 | 2 | 18 | 49 | 15 | 7 | 9 | 19 | 29 | 50 | 39 | 10 | 7 | 46 | 57 | 29 | 1 | 4 | 8 | 47 | 1 | 3 | 10 | 25 | 18 | 1 |
| 1568 | 0 | 11 | 31 | 12 | [illegible] | 2 | 19 | 50 | 57 | 55 | 9 | 19 | 38 | 39 | 38 | 2 | 21 | 20 | 45 | 3 | 2 | 13 | 53 | 15 | 21 | 8 | 20 | 48 | 16 | 47 |
| 1588 | 0 | 11 | 40 | [illegible] | 59 | 2 | 20 | 52 | 40 | 50 | 9 | 19 | 17 | 28 | 35 | 7 | 4 | 54 | 32 | 36 | 3 | 23 | 37 | 30 | 41 | 2 | 1 | 12 | 37 | 33 |
| 1608 | 0 | 11 | 48 | [illegible] | 58 | 2 | 21 | [illegible] | 23 | 41 | 9 | 20 | 6 | 17 | 35 | 11 | 18 | 28 | 20 | 10 | 5 | 3 | 22 | 6 | 2 | 7 | 11 | 36 | 15 | 19 |
| 1628 | 0 | 11 | 57 | 38 | 19 | 2 | 22 | 56 | 6 | 33 | 9 | 20 | 15 | 6 | 33 | 4 | 2 | 2 | 7 | 44 | 6 | 13 | 6 | 32 | 22 | 0 | 21 | 59 | 53 | 6 |
| 1648 | 0 | 12 | 6 | 27 | 58 | 2 | 23 | 57 | 49 | 24 | 9 | 20 | 23 | 57 | 32 | 8 | 15 | 35 | 55 | 18 | 7 | 22 | 50 | 58 | 42 | 6 | 2 | 23 | 31 | 52 |
| 1668 | 0 | 12 | 15 | 10 | 57 | 2 | 24 | 59 | 34 | [illegible] | 9 | 20 | 32 | 44 | 30 | 0 | 20 | 9 | 42 | 51 | 9 | 2 | 35 | 25 | 2 | 11 | 12 | 47 | 10 | 38 |
| 1688 | 0 | 12 | [illegible] | [illegible] | 56 | 2 | 26 | 1 | 14 | 7 | 9 | 20 | 41 | 33 | 29 | 5 | 12 | 43 | 30 | 25 | 10 | 12 | 19 | 51 | 23 | 4 | 27 | 10 | 49 | 24 |
| 1708 | 0 | 12 | 37 | 54 | 40 | 2 | 27 | 2 | 57 | 58 | 9 | 20 | 50 | 22 | 28 | 9 | 36 | 17 | 17 | 59 | 11 | 22 | 4 | 17 | 43 | 10 | 3 | 34 | 28 | 10 |
| 1728 | 0 | 12 | 41 | 43 | 50 | 2 | 28 | 4 | 40 | 50 | 9 | 20 | 59 | 11 | 27 | 2 | 9 | 51 | 5 | 33 | 1 | 1 | 44 | 44 | 3 | 3 | 13 | 58 | 6 | 56 |
| 1748 | 0 | 12 | 50 | 32 | [illegible] | 2 | 29 | 6 | 23 | 41 | 9 | 21 | 8 | 0 | 25 | 6 | 23 | 24 | 53 | 6 | 2 | 11 | 33 | 10 | 23 | 8 | 24 | 21 | 45 | 42 |
| 1768 | 0 | 12 | 59 | 21 | [illegible] | 3 | 0 | 8 | 0 | 33 | 9 | 21 | 16 | [illegible] | 24 | 11 | 6 | 58 | 40 | 40 | 3 | 21 | 17 | 36 | 44 | 2 | 4 | 45 | 34 | 28 |
| 1788 | 0 | 13 | 8 | 10 | 47 | 3 | 1 | 9 | 40 | 34 | 9 | 21 | 27 | 38 | 23 | 3 | 20 | 32 | 28 | 14 | 5 | 1 | 2 | 3 | 4 | 7 | 15 | 9 | 3 | 14 |
| 1808 | 0 | 13 | 16 | 59 | 56 | 3 | 2 | 11 | 32 | 14 | 9 | 21 | 34 | 27 | 22 | 8 | 4 | 6 | 14 | 44 | 6 | 10 | 46 | 29 | 24 | 0 | 24 | 32 | 42 | 0 |

## Meridianum Exon' verificate et primo in annis cristi collectis:-

| Collecti | Motus capitis | | | | | Saturni | | | | | Jovis | | | | | Martis | | | | | Argumentum Veneris | | | | | Argumentum mercurii | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1428 | 11 | 23 | 39 | 13 | 18 | 8 | 24 | 12 | 46 | 39 | 11 | 7 | 47 | 49 | 43 | 4 | 23 | 9 | 38 | 1 | 6 | 29 | 45 | 38 | 5 | 2 | 9 | 42 | 49 | 20 |
| 1448 | 0 | 18 | 29 | 4 | 21 | 4 | 29 | 54 | 23 | 46 | 7 | 15 | 2 | 26 | 0 | 0 | 11 | 28 | 37 | 51 | 1 | 3 | 24 | 29 | 1 | 2 | 24 | 10 | 28 | 11 |
| 1468 | 1 | 15 | 18 | 57 | 43 | 1 | 4 | 36 | 0 | 52 | 3 | 22 | 17 | 2 | [illegible] | 7 | 29 | 41 | 33 | 41 | 7 | 7 | 3 | 19 | 57 | 3 | 8 | 38 | 7 | 3 |
| 1488 | 2 | 12 | 8 | 46 | 55 | 0 | 9 | 17 | 37 | 59 | 11 | 29 | 31 | 38 | 35 | 3 | 18 | 6 | 31 | 31 | 1 | 10 | 42 | 10 | 53 | 3 | 23 | 5 | 45 | 52 |
| 1508 | 3 | 8 | [illegible] | 38 | 8 | 5 | 17 | 59 | 15 | 6 | 8 | 6 | 46 | 14 | 52 | 11 | 6 | 25 | 29 | 21 | 7 | 14 | 21 | 1 | 49 | 4 | 7 | 33 | 24 | 46 |
| 1528 | 4 | 5 | 48 | 29 | 20 | 1 | 18 | 40 | 57 | 12 | 4 | 14 | 0 | 41 | 0 | 6 | 24 | 44 | 27 | 11 | 1 | 17 | 59 | 52 | 45 | 4 | 22 | 1 | 3 | 37 |
| 1548 | 5 | 2 | 38 | 20 | 34 | 9 | 23 | 22 | 29 | 19 | 0 | 21 | 15 | 27 | 27 | 2 | 13 | 3 | 25 | 1 | 7 | 21 | 38 | 43 | 41 | 5 | 6 | 28 | 42 | 24 |
| 1568 | 5 | 29 | 28 | 11 | 45 | 5 | 28 | 4 | 6 | 25 | 8 | 28 | 30 | 3 | 44 | 10 | 1 | 22 | 22 | 53 | 1 | 25 | 17 | 34 | 37 | 5 | 20 | 56 | 21 | 20 |
| 1588 | 6 | 26 | 18 | 2 | 57 | 2 | 2 | 45 | 43 | 32 | 5 | 5 | 44 | 40 | 1 | 5 | 19 | 41 | 20 | 42 | 7 | 28 | 56 | 25 | 33 | 6 | 5 | 24 | 0 | 11 |
| 1608 | 7 | 23 | 7 | 58 | 9 | 10 | 7 | 27 | 20 | 39 | 1 | 12 | 49 | 16 | 18 | 1 | 8 | 0 | 18 | 32 | 2 | 2 | 35 | 16 | 29 | 6 | 15 | 51 | 39 | 3 |
| 1628 | 8 | 19 | 57 | 45 | 22 | 6 | 12 | 8 | 57 | 45 | 9 | 20 | 13 | 52 | 36 | 8 | 26 | 19 | 16 | 22 | 8 | 6 | 14 | 7 | 25 | 7 | 4 | 19 | 17 | 54 |
| 1648 | 9 | 16 | 47 | 36 | 34 | 2 | 16 | 50 | 34 | 52 | 5 | 27 | 28 | 28 | 53 | 4 | 14 | 38 | 14 | 14 | 2 | 9 | 52 | 58 | 21 | 7 | 18 | [illegible] | [illegible] | [illegible] |
| 1668 | 10 | 13 | 37 | 27 | 46 | 10 | 21 | 32 | 11 | 59 | 2 | 4 | 23 | 5 | 10 | 0 | 2 | 57 | 12 | 2 | 8 | 13 | 31 | 49 | 17 | 8 | 3 | 14 | 35 | 37 |
| 1688 | 11 | 10 | 27 | 18 | 59 | 6 | 26 | 13 | 49 | 5 | 10 | 11 | 57 | 41 | 27 | 7 | 21 | 16 | 9 | 52 | 2 | 17 | 10 | 40 | 13 | 8 | 17 | 42 | 14 | 28 |
| 1708 | 0 | 7 | 17 | 10 | 11 | 3 | 0 | 51 | 26 | 12 | 6 | 19 | 12 | 17 | 44 | 3 | 9 | 35 | 7 | 43 | 8 | 20 | 49 | 31 | 9 | 9 | 2 | 9 | 53 | 20 |
| 1728 | 1 | 4 | 7 | 1 | 23 | 11 | 5 | 37 | 3 | 18 | 2 | 26 | 26 | 54 | 2 | 10 | 27 | 54 | 5 | 33 | 2 | 24 | 28 | 22 | 5 | 9 | 16 | 37 | 32 | 11 |
| 1748 | 2 | 0 | 16 | 12 | 36 | 7 | 10 | 18 | 40 | 25 | 11 | 3 | 41 | 30 | 19 | 6 | 16 | 13 | 7 | 23 | 8 | 28 | 7 | 13 | 1 | 10 | 1 | 5 | 11 | 3 |
| 1768 | 2 | 27 | 46 | 43 | 48 | 3 | 15 | 0 | 17 | 32 | 7 | 10 | 56 | 6 | 36 | 2 | 4 | 32 | 1 | 13 | 3 | 1 | 46 | 3 | 57 | 10 | 15 | 32 | 45 | 54 |
| 1788 | 3 | 24 | 36 | 35 | 0 | 11 | 19 | 43 | 54 | 38 | 3 | 18 | 10 | 45 | 54 | 9 | 22 | 50 | 49 | 3 | 0 | 5 | 24 | 54 | 13 | 11 | 0 | 0 | 28 | 46 |
| 1808 | 4 | 21 | 26 | 26 | 13 | 7 | 24 | 23 | 35 | 45 | 11 | 25 | 25 | 19 | 11 | 5 | 11 | 0 | 46 | 43 | 3 | 9 | 3 | 55 | 49 | 11 | 14 | 24 | 7 | 37 |

# Tabula mediorum motuum planetarum in annis expansis

| Anni expansi | Tabula augmenti et stellarum fixarum | | | | | Tabula accessus et recessus 8ue sphere | | | | | Tabula medij motus solis ♀ et mercurij | | | | | Tabula medij motus lune ☾ | | | | | Medius motus argumenti lune | | | | | Medium argumentum latitudinis lune | | | | | Dim[...] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 26 | 26 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | |
| 2 | 0 | 0 | 0 | 52 | 52 | 0 | 0 | 3 | 7 | 1 | 11 | 29 | 45 | 39 | 22 | 4 | 9 | 23 | 2 | 31 | 2 | 28 | 43 | 34 | 40 | 4 | 25 | 42 | 44 | 31 | 1 |
| 3 | 0 | 0 | 1 | 19 | 18 | 0 | 0 | 6 | 10 | 2 | 11 | 29 | 31 | 18 | 44 | 5 | 18 | 46 | [illegible] | [illegible] | 5 | 27 | 26 | 29 | 39 | 9 | 27 | 25 | 29 | 2 | 2 |
| B 4 | 0 | 0 | 1 | 45 | 48 | 0 | 0 | 9 | 17 | 3 | 11 | 29 | 16 | 58 | 6 | 0 | 28 | 9 | 7 | 52 | 8 | 26 | 9 | [illegible] | 49 | 2 | 26 | 8 | 15 | 38 | 3 |
| 5 | 0 | 0 | 2 | 12 | 14 | 0 | 0 | 12 | 20 | 34 | 0 | 0 | 1 | 45 | 48 | 5 | 20 | 42 | 45 | 31 | 0 | 7 | 56 | 43 | 16 | 5 | 8 | 4 | 41 | 45 | 4 |
| 6 | 0 | 0 | 2 | 38 | 39 | 0 | 0 | 15 | 25 | 35 | 11 | 29 | 47 | 24 | 10 | 10 | 0 | 5 | 45 | 8 | 3 | 6 | 50 | 8 | 6 | 1 | 6 | 47 | 28 | 17 | 5 |
| 7 | 0 | 0 | 3 | 5 | 5 | 0 | 0 | 18 | 30 | 36 | 11 | 29 | 33 | 4 | 32 | 2 | 9 | 28 | 50 | 45 | 6 | 5 | 23 | 22 | 55 | 6 | 5 | 30 | 12 | 48 | 6 |
| B 8 | 0 | 0 | 3 | 31 | 36 | 0 | 0 | 21 | 34 | 37 | 11 | 29 | 18 | 43 | 54 | 6 | 18 | 51 | 53 | 23 | 9 | 4 | 6 | 37 | 45 | 11 | 4 | 12 | 57 | 20 | 7 |
| 9 | 0 | 0 | 3 | 58 | [illegible] | 0 | 0 | 24 | 41 | 9 | 0 | 0 | 3 | 31 | 36 | 11 | 11 | 24 | 31 | 1 | 0 | 15 | 53 | 46 | 32 | 4 | 16 | 0 | 27 | 30 | 8 |
| 10 | 0 | 0 | 4 | 24 | 27 | 0 | 0 | 27 | 46 | 10 | 11 | 29 | 49 | 10 | 48 | 3 | 20 | 46 | 33 | 39 | 3 | 44 | 37 | 1 | 22 | 9 | 18 | 52 | 12 | 2 | 9 |
| 11 | 0 | 0 | 4 | 50 | 53 | 0 | 0 | 30 | 51 | 11 | 11 | 29 | 32 | 50 | 20 | 5 | 0 | 11 | 36 | 16 | 6 | 13 | 20 | 16 | 11 | 2 | 13 | 38 | 46 | 33 | 10 |
| B 12 | 0 | 0 | 5 | 17 | 23 | 0 | 0 | 33 | 56 | 11 | 11 | 29 | 20 | 29 | 42 | 0 | 9 | 34 | 38 | 48 | 9 | 12 | 3 | 31 | 1 | 7 | 12 | 17 | 41 | 5 | 11 |
| 13 | 0 | 0 | 5 | 43 | 49 | 0 | 0 | 23 | 6 | 49 | 11 | 29 | 50 | 56 | 45 | 1 | 2 | 8 | 16 | 32 | 0 | 23 | 40 | 39 | 48 | 0 | 28 | 35 | 11 | 16 | 12 |
| 14 | 0 | 0 | 6 | 10 | 15 | 0 | 0 | 40 | 6 | 44 | [struck through] | | | | | 9 | 11 | 31 | 19 | 10 | 3 | 22 | 37 | 52 | 38 | 4 | 22 | 46 | 44 | 57 | 13 |
| 15 | 0 | 0 | 6 | 36 | 41 | 0 | 0 | 43 | 11 | 54 | 11 | 29 | 36 | 36 | 7 | 1 | 20 | 41 | 21 | 51 | 6 | 21 | 17 | 9 | 27 | 10 | 21 | 39 | 50 | 18 | 14 |
| B 16 | 0 | 0 | 7 | 3 | 11 | 0 | 0 | 46 | 16 | 56 | 11 | 29 | 22 | 14 | 29 | 6 | 0 | 17 | 26 | 25 | 9 | 20 | 0 | 25 | 17 | 3 | 20 | 22 | 25 | 40 | 15 |
| 17 | 0 | 0 | 7 | 29 | 37 | 0 | 0 | 49 | 22 | 17 | 0 | 0 | 7 | 3 | 11 | 10 | 22 | 51 | 2 | 3 | 1 | 1 | 57 | 33 | 4 | 9 | 2 | 18 | 44 | 1 | 16 |
| 18 | 0 | 0 | 7 | 56 | 3 | 0 | 0 | 52 | 27 | 18 | 11 | 29 | 42 | 22 | 33 | 3 | 2 | 18 | 4 | 40 | 4 | 0 | 30 | 57 | 48 | 2 | 1 | 1 | 30 | 32 | 17 |
| 19 | 0 | 0 | 8 | 22 | 29 | 0 | 0 | 55 | 32 | 19 | 11 | 29 | 38 | 21 | 55 | 7 | 11 | 37 | 7 | 18 | 6 | 29 | 15 | 2 | 53 | 6 | 29 | 45 | 25 | 4 | 18 |
| B 20 | 0 | 0 | 8 | 48 | [illegible] | 0 | 0 | 58 | 37 | 20 | 11 | 29 | 24 | 1 | 17 | 11 | 21 | 0 | 9 | 49 | 2 | 7 | 47 | 17 | 33 | 11 | 28 | 27 | 5 | 34 | 19 |
| | S | G | m | 2 | 3 | 0 | 1 | 1 | 52 | 49 | 0 | 0 | 8 | 58 | 49 | 4 | 13 | 33 | 7 | 44 | 1 | 9 | 55 | 26 | 20 | 4 | 10 | 23 | 38 | 50 | |

## In annis expansis

| Anni | Augmentum Capitis | | | | | Medius Saturni | | | | | Jovis | | | | | Medius martis | | | | | Argumentum veneris | | | | | Argumentum mercurij | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 19 | 19 | 51 | 48 | 0 | 12 | 13 | 34 | 43 | 1 | 0 | 20 | 29 | 0 | 6 | 11 | 14 | 5 | 14 | 7 | 14 | 1 | 51 | 51 | 1 | 23 | 40 | 50 | 44 |
| 2 | 1 | 8 | 39 | 23 | 48 | 0 | 25 | 21 | 9 | 24 | 2 | 0 | 50 | 48 | 0 | 0 | 22 | 38 | 10 | 28 | 3 | 0 | 3 | 23 | 22 | 3 | 17 | 43 | 33 | 49 |
| 3 | 1 | 27 | 49 | 5 | 42 | 1 | 6 | 40 | 44 | 8 | 3 | 1 | [illegible] | [illegible] | 0 | 7 | 3 | 55 | 17 | 42 | 10 | 17 | 5 | 5 | 3 | 5 | 11 | 50 | 20 | 44 |
| B 4 | 2 | 17 | 21 | 48 | 14 | 1 | 15 | 46 | 10 | 24 | 4 | 1 | [illegible] | [illegible] | 14 | 1 | 14 | 39 | 41 | 38 | 6 | 0 | 43 | 26 | 10 | 7 | 8 | 43 | 31 | 40 |
| 5 | 3 | 6 | 41 | 40 | 9 | 2 | 1 | 9 | 48 | 8 | 5 | 1 | [illegible] | 25 | 14 | 7 | 26 | 46 | 47 | 48 | 1 | 17 | 44 | 21 | 41 | 9 | 2 | 40 | 15 | 41 |
| 6 | 3 | 26 | 1 | 22 | 3 | 2 | 13 | 27 | 26 | 40 | 6 | 2 | 7 | 43 | 14 | 2 | 8 | 13 | 45 | 2 | 9 | 0 | 41 | 9 | 32 | 10 | 26 | 41 | 4 | 30 |
| 7 | 4 | 14 | 26 | 3 | 47 | 2 | 24 | 37 | 3 | 33 | 7 | 2 | 28 | 22 | 14 | 5 | 19 | 30 | 7 | 16 | 4 | 14 | 45 | 41 | 13 | 0 | 20 | 43 | 42 | 30 |
| B 8 | 5 | 4 | 43 | 46 | 29 | 3 | 7 | 42 | 38 | 41 | 8 | 2 | 43 | 49 | 31 | 7 | 1 | 19 | 34 | 8 | 0 | 1 | 27 | 32 | 21 | 2 | 14 | 47 | 3 | 33 |
| 9 | 5 | 24 | 3 | 38 | 29 | 3 | 20 | 6 | 13 | 33 | 9 | 3 | 15 | 19 | 31 | 9 | 12 | 36 | 40 | 22 | 7 | 16 | 29 | 15 | 2 | 4 | 11 | 43 | 40 | 27 |
| 10 | 6 | 13 | 23 | 20 | 17 | 4 | 2 | 10 | 45 | 16 | 10 | 3 | 35 | 45 | 31 | 3 | 23 | 53 | 54 | 36 | 3 | 1 | 30 | 51 | 43 | 6 | 5 | 40 | 37 | 22 |
| 11 | 7 | 2 | 43 | 2 | 11 | 4 | 18 | 33 | 22 | 45 | 11 | 3 | 44 | 17 | 30 | 10 | 5 | 10 | 40 | 40 | 10 | 16 | 52 | 37 | 24 | 7 | 29 | 37 | 44 | 16 |
| B 12 | 7 | 22 | 5 | 54 | 43 | 4 | 26 | 45 | [illegible] | 55 | 0 | 4 | 20 | 54 | 26 | 4 | 16 | 59 | 24 | 22 | 6 | 2 | 11 | 38 | 33 | 9 | 26 | 54 | 34 | 10 |
| 13 | 8 | 11 | 24 | 36 | 37 | 5 | 9 | 2 | 32 | 58 | [illegible] | 4 | 51 | 18 | 26 | 10 | 28 | 16 | 27 | 46 | 1 | 17 | 13 | 0 | 14 | 11 | 20 | 37 | 22 | 11 |
| 14 | 9 | 0 | 54 | 18 | 32 | 5 | 21 | 16 | 7 | 51 | [illegible] | 5 | 1 | 53 | 56 | 5 | 9 | 33 | 33 | 10 | 9 | 2 | 14 | 51 | 55 | 1 | 18 | 38 | 9 | 8 |
| 15 | 9 | 20 | 5 | 9 | 26 | 6 | 3 | 29 | 52 | 23 | 3 | 5 | 22 | 12 | 56 | 11 | 20 | 50 | 38 | 25 | 4 | 11 | 16 | 23 | 34 | 3 | 8 | 30 | 56 | 3 |
| B 16 | 10 | 9 | 27 | 52 | 48 | 6 | 14 | 54 | 17 | 51 | 4 | 4 | 57 | 51 | 2 | 6 | 2 | 39 | 10 | 16 | 0 | 2 | 55 | 4 | 55 | 4 | 7 | 35 | 7 | 4 |
| 17 | 10 | 28 | 57 | 32 | 52 | 6 | 27 | [illegible] | 42 | 26 | 5 | 6 | 8 | 10 | 2 | 0 | 13 | 56 | 14 | 30 | 7 | 17 | 56 | 56 | 24 | 6 | 20 | 30 | 49 | 0 |
| 18 | 11 | 18 | 7 | 16 | 56 | 7 | 10 | 12 | 37 | 6 | 6 | 6 | 28 | 39 | 2 | 6 | 24 | 15 | 20 | 55 | 3 | 2 | 56 | 28 | 6 | 6 | 25 | 27 | 50 | 46 |
| 19 | 0 | 7 | 26 | 18 | 50 | 7 | 22 | 26 | 1 | 59 | 7 | 6 | 50 | 8 | 2 | 1 | 6 | 30 | 24 | 58 | 10 | 18 | 0 | 9 | 56 | 10 | 17 | 25 | 27 | 59 |
| B 20 | 0 | 26 | 59 | 41 | 12 | 8 | 5 | 53 | 37 | 7 | 8 | 7 | 15 | 36 | 17 | 7 | 15 | 15 | 47 | 40 | 6 | 3 | 38 | 40 | 46 | 0 | 15 | 27 | 38 | 41 |
| | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 |

# Tabula mediorum motuum in mensibus in anno communi

| Nomina mensium | Motus augium et stellarum fixarum | | | | | Motus accessus et recessus octave sphere | | | | | Motus solis veneris et mercurii | | | | | Motus lune | | | | | Argumentum lune | | | | | Argumentum latitudinis lune | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 |
| Januarius | 0 | 0 | 0 | 2 | 17 | 0 | 0 | 0 | 15 | 43 | 1 | 0 | 33 | 18 | 8 | 1 | 18 | 28 | 5 | 39 | 1 | 14 | 0 | 52 | 43 | 1 | 20 | 6 | 37 | 21 |
| Februarius | 0 | 0 | 0 | 4 | 16 | 0 | 0 | 0 | 29 | 54 | 1 | 28 | 9 | 11 | 18 | 1 | 27 | 34 | 26 | 18 | 1 | 20 | 50 | 3 | 33 | 2 | 0 | 35 | 13 | 41 |
| Marcius | 0 | 0 | 0 | 6 | 31 | 0 | 0 | 0 | 44 | 17 | 2 | 28 | 42 | 29 | 26 | 3 | 14 | 52 | 31 | 53 | 3 | 7 | 50 | 56 | 16 | 3 | 20 | 38 | 29 | 4 |
| Aprilis | 0 | 0 | 0 | 8 | 41 | 0 | 0 | 1 | 0 | 50 | 3 | 28 | 16 | 39 | 17 | 4 | 21 | 10 | 2 | 31 | 4 | 7 | 7 | 51 | 1 | 4 | 21 | 31 | 15 | 41 |
| Maius | 0 | 0 | 0 | 10 | 56 | 0 | 0 | 1 | 16 | 31 | 4 | 28 | 44 | 51 | 23 | 6 | 9 | 38 | 8 | 10 | 5 | 22 | 23 | 41 | 43 | 6 | 17 | 17 | 58 | 5 |
| Junius | 0 | 0 | 0 | 13 | 6 | 0 | 0 | 1 | 31 | 41 | 5 | 25 | 28 | 7 | 12 | 7 | 18 | 57 | 30 | 41 | 6 | 28 | 54 | 46 | 29 | 7 | 28 | 30 | 43 | 47 |
| Julius | 0 | 0 | 0 | 15 | 21 | 0 | 0 | 1 | 47 | 25 | 6 | 28 | 51 | 29 | 20 | 9 | 3 | 23 | 44 | 26 | 8 | 0 | 46 | 39 | 11 | 9 | 18 | 31 | 19 | 7 |
| Augustus | 0 | 0 | 0 | 17 | 36 | 0 | 0 | 2 | 3 | 11 | 7 | 29 | 30 | 43 | 28 | 10 | 21 | 51 | 50 | 1 | 9 | 28 | 41 | 31 | 58 | 11 | 4 | 43 | 58 | 26 |
| September | 0 | 0 | 0 | 19 | 46 | 0 | 0 | 2 | 18 | 23 | 8 | 29 | 4 | 53 | 17 | 11 | 27 | 0 | 20 | 43 | 10 | 26 | 44 | 30 | 39 | 0 | 11 | 36 | 44 | 9 |
| October | 0 | 0 | 0 | 22 | 1 | 0 | 0 | 2 | 34 | 6 | 9 | 29 | 38 | 11 | 29 | 1 | 15 | 37 | 36 | 21 | 0 | 11 | 45 | 23 | 22 | 2 | 1 | 43 | 19 | 30 |
| Nouember | 0 | 0 | 0 | 24 | 11 | 0 | 0 | 2 | 49 | 18 | 10 | 29 | 12 | 21 | 14 | 2 | 20 | 5 | 45 | 59 | 1 | 13 | 42 | 22 | 7 | 3 | 3 | 36 | 9 | 11 |
| December | 0 | 0 | 0 | 26 | 26 | 0 | 0 | 3 | 5 | 1 | 11 | 29 | 45 | 39 | 22 | 4 | 0 | 23 | 2 | 31 | 2 | 28 | 43 | 14 | 50 | 4 | 28 | 42 | 44 | 31 |

14 S G 2 m 3

| Nomina mensium | Caput draconis | | | | | Argumentum Saturni | | | | | Argumentum Iovis | | | | | Argumentum Martis | | | | | Argumentum veneris | | | | | Argumenti mercurii | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Januarius | 0 | 1 | 38 | 29 | 42 | 0 | 1 | 2 | 18 | 14 | 0 | 2 | 36 | 34 | 59 | 0 | 16 | 14 | 45 | 59 | 0 | 19 | 6 | 43 | 9 | 3 | 6 | 15 | 21 | 59 |
| Februarius | 0 | 3 | 7 | 21 | 29 | 0 | 1 | 58 | 38 | 42 | 0 | 4 | 16 | 54 | 12 | 1 | 0 | 51 | 12 | 1 | 1 | 6 | 22 | 27 | 56 | 6 | 3 | 11 | 43 | 35 |
| Marcius | 0 | 4 | 45 | 57 | 11 | 0 | 3 | 0 | 52 | 57 | 0 | 7 | 13 | 28 | 11 | 1 | 17 | 0 | 58 | 0 | 1 | 24 | 29 | 11 | 6 | 9 | 9 | 36 | 11 | 34 |
| Aprilis | 0 | 6 | 21 | 16 | 17 | 0 | 4 | 1 | 10 | 31 | 0 | 9 | 30 | 58 | 51 | 2 | 2 | 53 | 17 | 20 | 2 | 13 | 58 | 54 | 44 | 0 | 12 | 44 | 17 | 24 |
| Maius | 0 | 7 | 46 | 45 | 40 | 0 | 5 | 3 | 28 | 49 | 0 | 12 | 7 | 33 | 53 | 2 | 19 | 8 | 3 | 19 | 3 | 3 | 57 | 17 | 17 | 3 | 19 | 6 | 43 | 24 |
| Junius | 0 | 9 | 35 | 5 | 0 | 0 | 6 | 3 | 40 | 28 | 0 | 14 | 45 | 2 | 31 | 3 | 4 | 51 | 22 | 39 | 3 | 21 | 35 | 21 | 39 | 6 | 22 | 18 | 41 | 16 |
| Julius | 0 | 11 | 13 | 34 | 42 | 0 | 7 | 6 | 4 | 42 | 0 | 17 | 22 | 37 | 36 | 3 | 21 | 6 | 8 | 38 | 4 | 10 | 42 | 4 | 40 | 9 | 28 | 31 | 15 | 15 |
| Augustus | 0 | 12 | 52 | 4 | 23 | 0 | 8 | 8 | 22 | 51 | 0 | 20 | 59 | 11 | 55 | 4 | 7 | 20 | 48 | 36 | 4 | 29 | 40 | 41 | 58 | 1 | 4 | 55 | 43 | 14 |
| September | 0 | 14 | 24 | 23 | 24 | 0 | 9 | 8 | 40 | 31 | 0 | 22 | 37 | 41 | 18 | 4 | 23 | 4 | 13 | 56 | 5 | 18 | 18 | 31 | 40 | 4 | 8 | 1 | 41 | 5 |
| October | 0 | 16 | 4 | 53 | 9 | 0 | 10 | 10 | 58 | 40 | 0 | 25 | 18 | 16 | 17 | 5 | 9 | 18 | 49 | 55 | 6 | 7 | 25 | 18 | 50 | 7 | 18 | 26 | 15 | 4 |
| Nouember | 0 | 17 | 41 | 12 | 12 | 0 | 11 | 11 | 16 | 28 | 0 | 27 | 52 | 24 | 1 | 5 | 25 | 2 | 19 | 15 | 6 | 25 | 54 | 46 | 32 | 10 | 14 | 38 | 18 | 56 |
| December | 0 | 19 | 19 | 41 | 52 | 0 | 12 | 13 | 38 | 43 | 1 | 0 | 29 | 20 | 0 | 6 | 11 | 17 | 5 | 18 | 7 | 15 | 1 | 41 | 41 | 1 | 23 | 56 | 46 | 55 |
| | S | G | m | 2 | 3 | S | G | m | 2 | 3 | a | b | d | c | e | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 |

S G 2 m 3

# Tabula motuum in mensibus in anno bisextili :~

| Nomina mensium | Motus augium et stellarum fixarum | | | | | Motus accessus et recessus octave sphere | | | | | Motus solis veneris et mercurii | | | | | Medius motus lune | | | | | Argumentum lune | | | | | Motus argumenti latitudinis lune | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 |
| Januarius | 0 | 0 | 0 | 2 | 17 | 0 | 0 | 0 | 15 | 43 | 1 | 0 | 33 | 18 | 8 | 1 | 18 | 28 | 5 | 39 | 1 | 14 | 0 | 52 | 43 | 1 | 20 | 6 | 37 | 21 |
| Februarius | 0 | 0 | 0 | 4 | 21 | 0 | 0 | 0 | 30 | 24 | 1 | 29 | 8 | 19 | 37 | 2 | 10 | 34 | 1 | 15 | 2 | 3 | 53 | 57 | 30 | 2 | 13 | 45 | 39 | 22 |
| Marcius | 0 | 0 | 0 | 6 | 37 | 0 | 0 | 0 | 46 | 8 | 2 | 29 | 41 | 37 | 45 | 3 | 29 | 3 | 6 | 55 | 3 | 18 | 54 | 50 | 13 | 4 | 3 | 52 | 16 | 43 |
| Aprilis | 0 | 0 | 0 | 8 | 46 | 0 | 0 | 1 | 1 | 20 | 3 | 29 | 15 | 47 | 38 | 5 | 0 | 20 | 31 | 32 | 4 | 20 | 51 | 48 | 52 | 7 | 10 | 41 | 4 | 28 |
| Maius | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 1 | 17 | 3 | 4 | 29 | 49 | 5 | 43 | 6 | 22 | 58 | 43 | 10 | 6 | 5 | 52 | 41 | 41 | 7 | 0 | 51 | 39 | 41 |
| Junius | 0 | 0 | 0 | 13 | 11 | 0 | 0 | 1 | 32 | 15 | 5 | 29 | 23 | 15 | 31 | 7 | 28 | 6 | 13 | 58 | 7 | 7 | 49 | 40 | 26 | 8 | 7 | 44 | 29 | 26 |
| Julius | 0 | 0 | 0 | 15 | 25 | 0 | 0 | 1 | 47 | 58 | 6 | 29 | 56 | 33 | 39 | 9 | 16 | 38 | 49 | 21 | 8 | 22 | 50 | 33 | 0 | 9 | 21 | 51 | 4 | 47 |
| Augustus | 0 | 0 | 0 | 17 | 40 | 0 | 0 | 2 | 3 | 41 | 8 | 0 | 29 | 51 | 48 | 11 | 5 | 2 | 25 | 6 | 10 | 7 | 51 | 25 | 51 | 11 | 17 | 52 | 40 | 7 |
| September | 0 | 0 | 0 | 19 | 50 | 0 | 0 | 2 | 18 | 53 | 9 | 0 | 4 | 1 | 36 | 0 | 10 | 10 | 51 | 43 | 11 | 9 | 48 | 24 | 37 | 0 | 24 | 50 | 29 | 48 |
| October | 0 | 0 | 0 | 22 | 5 | 0 | 0 | 2 | 34 | 36 | 10 | 0 | 37 | 19 | 45 | 1 | 28 | 40 | 1 | 22 | 0 | 24 | 49 | 17 | 10 | 2 | 14 | 57 | 5 | 9 |
| Nouember | 0 | 0 | 0 | 24 | 16 | 0 | 0 | 2 | 49 | 49 | 11 | 0 | 11 | 29 | 33 | 3 | 4 | 5 | 32 | 0 | 1 | 26 | 46 | 16 | 4 | 3 | 21 | 49 | 58 | 50 |
| December | 0 | 0 | 0 | 26 | 30 | 0 | 0 | 3 | 5 | 32 | 0 | 0 | 44 | 47 | 42 | 4 | 22 | 33 | 31 | 59 | 3 | 11 | 47 | 8 | 47 | 4 | 11 | 56 | 30 | 11 |

| Nomina mensium | Caput draconis | | | | | Argumentum Saturni | | | | | Argumentum Iovis | | | | | Argumentum Martis | | | | | Argumentum veneris | | | | | Argumenti mercurii | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Januarius | 0 | 1 | 38 | 29 | 42 | 0 | 1 | 2 | 18 | 14 | 0 | 2 | 38 | 36 | 59 | 0 | 16 | 14 | 45 | 59 | 0 | 19 | 6 | 43 | 9 | 3 | 6 | 18 | 21 | 59 |
| Februarius | 0 | 3 | 10 | 38 | 7 | 0 | 2 | 0 | 34 | 18 | 0 | 4 | 49 | 17 | 24 | 1 | 1 | 26 | 38 | 40 | 1 | 16 | 49 | 24 | 48 | 6 | 6 | 24 | 1 | 43 |
| Marcius | 0 | 4 | 49 | 7 | 49 | 0 | 3 | 2 | 53 | 32 | 0 | 7 | 33 | 52 | 26 | 1 | 17 | 41 | 24 | 39 | 1 | 26 | 6 | 10 | 31 | 9 | 12 | 42 | 37 | 42 |
| Aprilis | 0 | 6 | 24 | 26 | 53 | 0 | 4 | 3 | 11 | 11 | 0 | 10 | 3 | 30 | 10 | 2 | 3 | 24 | 43 | 45 | 2 | 16 | 35 | 51 | 14 | 0 | 15 | 58 | 39 | 33 |
| Maius | 0 | 8 | 2 | 56 | 34 | 0 | 5 | 5 | 29 | 25 | 0 | 12 | 38 | 7 | 9 | 2 | 19 | 39 | 29 | 58 | 3 | 3 | 42 | 31 | 25 | 3 | 22 | 13 | 7 | 33 |
| Junius | 0 | 9 | 38 | 15 | 38 | 0 | 6 | 5 | 41 | 4 | 0 | 15 | 7 | 44 | 52 | 3 | 5 | 22 | 49 | 18 | 3 | 22 | 12 | 21 | 7 | 6 | 25 | 21 | 11 | 23 |
| Julius | 0 | 11 | 16 | 45 | 20 | 0 | 7 | 8 | 5 | 18 | 0 | 17 | 42 | 21 | 50 | 3 | 21 | 31 | 35 | 16 | 4 | 11 | 10 | 4 | 16 | 10 | 1 | 43 | 39 | 23 |
| Augustus | 0 | 12 | 55 | 15 | 1 | 0 | 8 | 10 | 23 | 32 | 0 | 20 | 16 | 58 | 50 | 4 | 7 | 52 | 21 | 55 | 5 | 0 | 25 | 41 | 26 | 1 | 8 | 2 | 7 | 22 |
| September | 0 | 14 | 30 | 34 | 5 | 0 | 9 | 10 | 41 | 11 | 0 | 22 | 46 | 36 | 34 | 4 | 23 | 35 | 40 | 34 | 5 | 18 | 55 | 31 | 8 | 4 | 11 | 18 | 11 | 13 |
| October | 0 | 16 | 9 | 3 | 47 | 0 | 10 | 12 | 59 | 25 | 0 | 25 | 21 | 13 | 33 | 5 | 9 | 50 | 26 | 38 | 6 | 8 | 2 | 18 | 17 | 7 | 17 | 32 | 39 | 12 |
| Nouember | 0 | 17 | 44 | 22 | 50 | 0 | 11 | 13 | 17 | 4 | 0 | 27 | 50 | 51 | 16 | 5 | 25 | 33 | 45 | 58 | 6 | 26 | 31 | 57 | 49 | 10 | 20 | 44 | 43 | 3 |
| December | 0 | 19 | 22 | 52 | 32 | 0 | 12 | 15 | 35 | 18 | 1 | 0 | 25 | 28 | 15 | 6 | 11 | 48 | 31 | 43 | 7 | 15 | 38 | 41 | 8 | 1 | 21 | 3 | 11 | 2 |
| | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 |

# Tabula mediorum motuum planetarum in diebus

| Numerus dierum | Tabula augis et stellarum fixarum | | | | | Tabula accessus et recessus 8ue sphere | | | | | Tabula medii motus solis veneris mercurii | | | | | Tabula medii motus lune | | | | | Tabula medii argumenti lune | | | | | Medius argumentum latitudinis lune | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | G | M | 2 | 3 | S | G | M | 2 | 3 | S | G | M | 2 | 3 | S | G | M | 2 | 3 | S | G | M | 2 | 3 | S | G | M | 2 | 3 |
| 1 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 59 | 8 | 20 | 0 | 13 | 10 | 35 | 1 | 0 | 13 | 3 | 53 | 58 | 0 | 13 | 13 | 45 | 39 |
| 2 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 58 | 16 | 39 | 0 | 26 | 21 | 10 | 3 | 0 | 26 | 7 | 47 | 55 | 0 | 26 | 27 | 31 | 19 |
| 3 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 1 | 31 | 0 | 2 | 57 | 24 | 59 | 1 | 9 | 31 | 45 | 4 | 1 | 9 | 11 | 41 | 53 | 1 | 9 | 41 | 16 | 58 |
| 4 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 2 | 2 | 0 | 3 | 56 | 33 | 18 | 1 | 22 | 42 | 20 | 5 | 1 | 22 | 15 | 35 | 50 | 1 | 22 | 55 | 2 | 37 |
| 5 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 2 | 32 | 0 | 4 | 55 | 41 | 38 | 2 | 5 | 52 | 55 | 6 | 2 | 5 | 19 | 29 | 48 | 2 | 6 | 8 | 48 | 17 |
| 6 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 3 | 2 | 0 | 5 | 54 | 49 | 58 | 2 | 19 | 3 | 30 | 8 | 2 | 18 | 23 | 23 | 47 | 2 | 19 | 22 | 33 | 56 |
| 7 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 3 | 32 | 0 | 6 | 53 | 58 | 17 | 3 | 2 | 14 | 5 | 9 | 3 | 1 | 27 | 17 | 43 | 3 | 2 | 36 | 19 | 36 |
| 8 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 4 | 3 | 0 | 7 | 53 | 6 | 37 | 3 | 15 | 24 | 40 | 10 | 3 | 14 | 31 | 11 | 40 | 3 | 15 | 50 | 5 | 15 |
| 9 | 0 | 0 | 0 | 0 | 39 | 0 | 0 | 0 | 4 | 34 | 0 | 8 | 52 | 14 | 56 | 3 | 28 | 35 | 15 | 11 | 3 | 27 | 35 | 5 | 38 | 3 | 29 | 3 | 50 | 54 |
| 10 | 0 | 0 | 0 | 0 | 43 | 0 | 0 | 0 | 5 | 4 | 0 | 9 | 51 | 23 | 16 | 4 | 11 | 45 | 50 | 13 | 4 | 10 | 38 | 59 | 37 | 4 | 12 | 17 | 36 | 34 |
| 11 | 0 | 0 | 0 | 0 | 48 | 0 | 0 | 0 | 5 | 34 | 0 | 10 | 50 | 31 | 36 | 4 | 24 | 56 | 25 | 14 | 4 | 23 | 42 | 53 | 33 | 4 | 25 | 31 | 22 | 13 |
| 12 | 0 | 0 | 0 | 0 | 52 | 0 | 0 | 0 | 6 | 5 | 0 | 11 | 49 | 39 | 55 | 5 | 8 | 7 | 0 | 15 | 5 | 6 | 46 | 47 | 30 | 5 | 8 | 45 | 7 | 52 |
| 13 | 0 | 0 | 0 | 0 | 56 | 0 | 0 | 0 | 6 | 35 | 0 | 12 | 48 | 48 | 15 | 5 | 21 | 17 | 35 | 16 | 5 | 19 | 50 | 41 | 28 | 5 | 21 | 58 | 53 | 32 |
| 14 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | 6 | 0 | 13 | 47 | 56 | 34 | 6 | 4 | 28 | 10 | 18 | 6 | 2 | 54 | 35 | 24 | 6 | 5 | 12 | 39 | 11 |
| 15 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 7 | 36 | 0 | 14 | 47 | 4 | 54 | 6 | 17 | 38 | 45 | 19 | 6 | 15 | 58 | 29 | 23 | 6 | 18 | 26 | 24 | 51 |
| 16 | 0 | 0 | 0 | 1 | 10 | 0 | 0 | 0 | 8 | 7 | 0 | 15 | 46 | 13 | 14 | 7 | 0 | 49 | 20 | 20 | 6 | 29 | 2 | 23 | 20 | 7 | 1 | 40 | 10 | 30 |
| 17 | 0 | 0 | 0 | 1 | 14 | 0 | 0 | 0 | 8 | 37 | 0 | 16 | 45 | 21 | 32 | 7 | 13 | 59 | 55 | 21 | 7 | 12 | 6 | 17 | 15 | 7 | 14 | 53 | 56 | 9 |
| 18 | 0 | 0 | 0 | 1 | 18 | 0 | 0 | 0 | 9 | 7 | 0 | 17 | 44 | 29 | 53 | 7 | 27 | 10 | 30 | 23 | 7 | 25 | 10 | 11 | 14 | 7 | 28 | 7 | 41 | 49 |
| 19 | 0 | 0 | 0 | 1 | 23 | 0 | 0 | 0 | 9 | 38 | 0 | 18 | 43 | 38 | 13 | 8 | 10 | 21 | 5 | 24 | 8 | 8 | 14 | 5 | 13 | 8 | 11 | 21 | 27 | 28 |
| 20 | 0 | 0 | 0 | 1 | 27 | 0 | 0 | 0 | 10 | 8 | 0 | 19 | 42 | 46 | 32 | 8 | 23 | 31 | 40 | 25 | 8 | 21 | 17 | 59 | 10 | 8 | 24 | 35 | 13 | 7 |
| 21 | 0 | 0 | 0 | 1 | 31 | 0 | 0 | 0 | 10 | 39 | 0 | 20 | 41 | 54 | 52 | 9 | 6 | 42 | 15 | 26 | 9 | 4 | 21 | 53 | 8 | 9 | 7 | 48 | 58 | 47 |
| 22 | 0 | 0 | 0 | 1 | 36 | 0 | 0 | 0 | 11 | 9 | 0 | 21 | 41 | 3 | 12 | 9 | 19 | 52 | 50 | 28 | 9 | 17 | 25 | 47 | 5 | 9 | 21 | 2 | 44 | 26 |
| 23 | 0 | 0 | 0 | 1 | 40 | 0 | 0 | 0 | 11 | 40 | 0 | 22 | 40 | 11 | 31 | 10 | 3 | 3 | 25 | 29 | 10 | 0 | 29 | 41 | 3 | 10 | 4 | 16 | 30 | 6 |
| 24 | 0 | 0 | 0 | 1 | 44 | 0 | 0 | 0 | 12 | 10 | 0 | 23 | 39 | 19 | 51 | 10 | 16 | 14 | 0 | 30 | 10 | 13 | 33 | 35 | 0 | 10 | 17 | 30 | 15 | 45 |
| 25 | 0 | 0 | 0 | 1 | 49 | 0 | 0 | 0 | 12 | 40 | 0 | 24 | 38 | 28 | 11 | 10 | 29 | 24 | 35 | 31 | 10 | 26 | 37 | 28 | 58 | 11 | 0 | 44 | 1 | 25 |
| 26 | 0 | 0 | 0 | 1 | 53 | 0 | 0 | 0 | 13 | 11 | 0 | 25 | 37 | 36 | 30 | 11 | 12 | 35 | 10 | 33 | 11 | 9 | 41 | 22 | 55 | 11 | 13 | 57 | 47 | 4 |
| 27 | 0 | 0 | 0 | 1 | 57 | 0 | 0 | 0 | 13 | 41 | 0 | 26 | 36 | 44 | 50 | 11 | 25 | 45 | 45 | 34 | 11 | 22 | 45 | 16 | 53 | 11 | 27 | 11 | 32 | 43 |
| 28 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 14 | 12 | 0 | 27 | 35 | 53 | 9 | 0 | 8 | 56 | 20 | 35 | 0 | 5 | 49 | 10 | 50 | 0 | 10 | 25 | 18 | 22 |
| 29 | 0 | 0 | 0 | 2 | 6 | 0 | 0 | 0 | 14 | 42 | 0 | 28 | 35 | 1 | 29 | 0 | 22 | 6 | 55 | 36 | 0 | 18 | 53 | 4 | 48 | 0 | 23 | 39 | 4 | 2 |
| 30 | 0 | 0 | 0 | 2 | 10 | 0 | 0 | 0 | 15 | 12 | 0 | 29 | 34 | 9 | 49 | 1 | 5 | 17 | 30 | 38 | 1 | 1 | 56 | 58 | 45 | 1 | 6 | 52 | 49 | 41 |
| 31 | 0 | 0 | 0 | 2 | 14 | 0 | 0 | 0 | 15 | 43 | 1 | 0 | 33 | 18 | 8 | 1 | 18 | 28 | 5 | 39 | 1 | 14 | 0 | 52 | 43 | 1 | 20 | 6 | 35 | 21 |

## Secunda pars tabule precedentis in diebus:-

| Dies | Caput draconis | | | | | Medius saturni | | | | | Medius iovis | | | | | Medius martis | | | | | Argumentum veneris | | | | | Argumentum mercurii | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 3 | 10 | 38 | 0 | 0 | 2 | 0 | 35 | 0 | 0 | 4 | 59 | 15 | 0 | 0 | 31 | 26 | 39 | 0 | 0 | 36 | 59 | 27 | 0 | 3 | 6 | 24 | 8 |
| 2 | 0 | 0 | 6 | 21 | 16 | 0 | 0 | 4 | 1 | 11 | 0 | 0 | 9 | 58 | 31 | 0 | 1 | 2 | 53 | 18 | 0 | 1 | 13 | 58 | 54 | 0 | 6 | 12 | 48 | 16 |
| 3 | 0 | 0 | 9 | 31 | 54 | 0 | 0 | 6 | 1 | 46 | 0 | 0 | 14 | 57 | 46 | 0 | 1 | 34 | 19 | 57 | 0 | 1 | 50 | 58 | 21 | 0 | 9 | 19 | 12 | 23 |
| 4 | 0 | 0 | 12 | 42 | 32 | 0 | 0 | 8 | 2 | 21 | 0 | 0 | 19 | 57 | 2 | 0 | 2 | 5 | 46 | 36 | 0 | 2 | 27 | 57 | 48 | 0 | 12 | 25 | 36 | 31 |
| 5 | 0 | 0 | 15 | 53 | 11 | 0 | 0 | 10 | 2 | 56 | 0 | 0 | 24 | 56 | 17 | 0 | 2 | 37 | 13 | 15 | 0 | 3 | 4 | 57 | 15 | 0 | 15 | 32 | 0 | 39 |
| 6 | 0 | 0 | 19 | 3 | 49 | 0 | 0 | 12 | 3 | 32 | 0 | 0 | 29 | 55 | 33 | 0 | 3 | 8 | 39 | 54 | 0 | 3 | 41 | 56 | 42 | 0 | 18 | 38 | 24 | 46 |
| 7 | 0 | 0 | 22 | 14 | 27 | 0 | 0 | 14 | 4 | 7 | 0 | 0 | 34 | 54 | 48 | 0 | 3 | 40 | 6 | 33 | 0 | 4 | 18 | 56 | 9 | 0 | 21 | 44 | 48 | 54 |
| 8 | 0 | 0 | 25 | 25 | 5 | 0 | 0 | 16 | 4 | 42 | 0 | 0 | 39 | 54 | 4 | 0 | 4 | 11 | 33 | 12 | 0 | 4 | 55 | 55 | 36 | 0 | 24 | 51 | 13 | 2 |
| 9 | 0 | 0 | 28 | 35 | 43 | 0 | 0 | 18 | 5 | 18 | 0 | 0 | 44 | 53 | 19 | 0 | 4 | 42 | 59 | 51 | 0 | 5 | 32 | 55 | 3 | 0 | 27 | 57 | 37 | 9 |
| 10 | 0 | 0 | 31 | 46 | 21 | 0 | 0 | 20 | 5 | 53 | 0 | 0 | 49 | 52 | 35 | 0 | 5 | 14 | 26 | 30 | 0 | 6 | 9 | 54 | 30 | 1 | 1 | 4 | 1 | 16 |
| 11 | 0 | 0 | 34 | 56 | 59 | 0 | 0 | 22 | 6 | 28 | 0 | 0 | 54 | 51 | 50 | 0 | 5 | 45 | 53 | 9 | 0 | 6 | 46 | 53 | 57 | 1 | 4 | 10 | 25 | 24 |
| 12 | 0 | 0 | 38 | 7 | 37 | 0 | 0 | 24 | 7 | 4 | 0 | 0 | 59 | 51 | 5 | 0 | 6 | 17 | 19 | 48 | 0 | 7 | 23 | 53 | 24 | 1 | 7 | 16 | 49 | 33 |
| 13 | 0 | 0 | 41 | 18 | 16 | 0 | 0 | 26 | 7 | 39 | 0 | 1 | 4 | 50 | 20 | 0 | 6 | 48 | 46 | 27 | 0 | 8 | 0 | 52 | 51 | 1 | 10 | 23 | 13 | 40 |
| 14 | 0 | 0 | 44 | 28 | 54 | 0 | 0 | 28 | 8 | 14 | 0 | 1 | 9 | 49 | 36 | 0 | 7 | 20 | 13 | 6 | 0 | 8 | 37 | 52 | 18 | 1 | 13 | 29 | 37 | 48 |
| 15 | 0 | 0 | 47 | 39 | 32 | 0 | 0 | 30 | 8 | 49 | 0 | 1 | 14 | 48 | 51 | 0 | 7 | 51 | 39 | 45 | 0 | 9 | 14 | 51 | 45 | 1 | 16 | 36 | 1 | 56 |
| 16 | 0 | 0 | 50 | 50 | 10 | 0 | 0 | 32 | 9 | 24 | 0 | 1 | 19 | 47 | 7 | 0 | 8 | 23 | 6 | 19 | 0 | 9 | 51 | 51 | 12 | 1 | 19 | 42 | 26 | 3 |
| 17 | 0 | 0 | 54 | 0 | 48 | 0 | 0 | 34 | 10 | 0 | 0 | 1 | 24 | 47 | 23 | 0 | 8 | 54 | 32 | 57 | 0 | 10 | 28 | 50 | 39 | 1 | 22 | 48 | 50 | 11 |
| 18 | 0 | 0 | 57 | 11 | 26 | 0 | 0 | 36 | 10 | 35 | 0 | 1 | 29 | 46 | 38 | 0 | 9 | 25 | 59 | 36 | 0 | 11 | 5 | 50 | 6 | 1 | 25 | 55 | 14 | 19 |
| 19 | 0 | 1 | 0 | 22 | 4 | 0 | 0 | 38 | 11 | 11 | 0 | 1 | 34 | 45 | 54 | 0 | 9 | 57 | 26 | 14 | 0 | 11 | 42 | 49 | 33 | 1 | 29 | 1 | 38 | 27 |
| 20 | 0 | 1 | 3 | 32 | 42 | 0 | 0 | 40 | 11 | 46 | 0 | 1 | 39 | 45 | 9 | 0 | 10 | 28 | 52 | 53 | 0 | 12 | 19 | 49 | 0 | 2 | 2 | 8 | 2 | 35 |
| 21 | 0 | 1 | 6 | 43 | 21 | 0 | 0 | 42 | 12 | 21 | 0 | 1 | 44 | 44 | 25 | 0 | 11 | 0 | 19 | 32 | 0 | 12 | 56 | 48 | 27 | 2 | 5 | 14 | 26 | 42 |
| 22 | 0 | 1 | 9 | 53 | 59 | 0 | 0 | 44 | 12 | 56 | 0 | 1 | 49 | 43 | 40 | 0 | 11 | 31 | 46 | 11 | 0 | 13 | 33 | 47 | 54 | 2 | 8 | 20 | 50 | 50 |
| 23 | 0 | 1 | 13 | 4 | 37 | 0 | 0 | 46 | 13 | 32 | 0 | 1 | 54 | 42 | 55 | 0 | 12 | 3 | 12 | 49 | 0 | 14 | 10 | 47 | 21 | 2 | 11 | 27 | 14 | 58 |
| 24 | 0 | 1 | 16 | 15 | 15 | 0 | 0 | 48 | 14 | 7 | 0 | 1 | 59 | 42 | 11 | 0 | 12 | 34 | 39 | 28 | 0 | 14 | 47 | 46 | 48 | 2 | 14 | 33 | 39 | 5 |
| 25 | 0 | 1 | 19 | 25 | 53 | 0 | 0 | 50 | 14 | 42 | 0 | 2 | 4 | 41 | 26 | 0 | 13 | 6 | 6 | 7 | 0 | 15 | 24 | 46 | 15 | 2 | 17 | 40 | 3 | 13 |
| 26 | 0 | 1 | 22 | 36 | 31 | 0 | 0 | 52 | 15 | 18 | 0 | 2 | 9 | 40 | 42 | 0 | 13 | 37 | 32 | 46 | 0 | 16 | 1 | 45 | 42 | 2 | 20 | 46 | 27 | 20 |
| 27 | 0 | 1 | 25 | 47 | 9 | 0 | 0 | 54 | 15 | 53 | 0 | 2 | 14 | 39 | 57 | 0 | 14 | 8 | 59 | 25 | 0 | 16 | 38 | 45 | 9 | 2 | 23 | 52 | 51 | 28 |
| 28 | 0 | 1 | 28 | 57 | 47 | 0 | 0 | 56 | 16 | 28 | 0 | 2 | 19 | 39 | 13 | 0 | 14 | 40 | 26 | 3 | 0 | 17 | 15 | 44 | 36 | 2 | 26 | 59 | 15 | 36 |
| 29 | 0 | 1 | 32 | 8 | 26 | 0 | 0 | 58 | 17 | 4 | 0 | 2 | 24 | 38 | 28 | 0 | 15 | 11 | 52 | 42 | 0 | 17 | 52 | 44 | 3 | 3 | 0 | 5 | 39 | 44 |
| 30 | 0 | 1 | 35 | 19 | 4 | 0 | 1 | 0 | 17 | 39 | 0 | 2 | 29 | 37 | 44 | 0 | 15 | 43 | 19 | 21 | 0 | 18 | 29 | 43 | 30 | 3 | 3 | 12 | 3 | 51 |
| 31 | 0 | 1 | 38 | 29 | 42 | 0 | 1 | 2 | 18 | 14 | 0 | 2 | 34 | 36 | 59 | 0 | 16 | 14 | 45 | 59 | 0 | 19 | 6 | 42 | 57 | 3 | 6 | 18 | 27 | 49 |

# Tabula argumentorum planetarum in diebus

| Di | Tabula argumenti Solis centri veneris et mercurii | | | | | Tabula argumenti Saturni | | | | | Tabula medii argumenti Jovis | | | | | Tabula medii argumenti Martis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 |
| 1 | 0 | 0 | 59 | 8 | 13 | 0 | 0 | 57 | 7 | 44 | 0 | 0 | 54 | 9 | 4 | 0 | 0 | 27 | 41 | 41 |
| 2 | 0 | 1 | 58 | 16 | 28 | 0 | 1 | 54 | 15 | 29 | 0 | 1 | 48 | 18 | 8 | 0 | 0 | 55 | 23 | 22 |
| 3 | 0 | 2 | 57 | 24 | 42 | 0 | 2 | 51 | 23 | 13 | 0 | 2 | 42 | 27 | 13 | 0 | 1 | 23 | 5 | 3 |
| 4 | 0 | 3 | 56 | 32 | 56 | 0 | 3 | 48 | 30 | 57 | 0 | 3 | 36 | 36 | 17 | 0 | 1 | 50 | 46 | 44 |
| 5 | 0 | 4 | 55 | 41 | 10 | 0 | 4 | 45 | 38 | 42 | 0 | 4 | 30 | 45 | 21 | 0 | 2 | 18 | 28 | 25 |
| 6 | 0 | 5 | 54 | 49 | 24 | 0 | 5 | 42 | 46 | 26 | 0 | 5 | 24 | 54 | 25 | 0 | 2 | 46 | 10 | 6 |
| 7 | 0 | 6 | 53 | 57 | 37 | 0 | 6 | 39 | 54 | 10 | 0 | 6 | 19 | 3 | 29 | 0 | 3 | 13 | 51 | 47 |
| 8 | 0 | 7 | 53 | 5 | 52 | 0 | 7 | 37 | 1 | 55 | 0 | 7 | 13 | 12 | 33 | 0 | 3 | 41 | 33 | 28 |
| 9 | 0 | 8 | 52 | 14 | 5 | 0 | 8 | 34 | 9 | 39 | 0 | 8 | 7 | 21 | 38 | 0 | 4 | 9 | 15 | 9 |
| 10 | 0 | 9 | 51 | 22 | 19 | 0 | 9 | 31 | 17 | 22 | 0 | 9 | 1 | 30 | 42 | 0 | 4 | 36 | 56 | 50 |
| 11 | 0 | 10 | 50 | 30 | 33 | 0 | 10 | 28 | 25 | 8 | 0 | 9 | 55 | 39 | 46 | 0 | 5 | 4 | 38 | 30 |
| 12 | 0 | 11 | 49 | 38 | 47 | 0 | 11 | 25 | 32 | 52 | 0 | 10 | 49 | 48 | 50 | 0 | 5 | 32 | 20 | 11 |
| 13 | 0 | 12 | 48 | 47 | 1 | 0 | 12 | 22 | 40 | 36 | 0 | 11 | 43 | 57 | 54 | 0 | 6 | 0 | 1 | 52 |
| 14 | 0 | 13 | 47 | 55 | 15 | 0 | 13 | 19 | 48 | 20 | 0 | 12 | 38 | 6 | 58 | 0 | 6 | 27 | 43 | 33 |
| 15 | 0 | 14 | 47 | 3 | 28 | 0 | 14 | 16 | 56 | 5 | 0 | 13 | 32 | 16 | 3 | 0 | 6 | 55 | 25 | 14 |
| 16 | 0 | 15 | 46 | 11 | 42 | 0 | 15 | 14 | 3 | 49 | 0 | 14 | 26 | 25 | 7 | 0 | 7 | 23 | 6 | 55 |
| 17 | 0 | 16 | 45 | 19 | 56 | 0 | 16 | 11 | 11 | 34 | 0 | 15 | 20 | 34 | 11 | 0 | 7 | 50 | 48 | 36 |
| 18 | 0 | 17 | 44 | 28 | 10 | 0 | 17 | 8 | 19 | 18 | 0 | 16 | 14 | 43 | 15 | 0 | 8 | 18 | 30 | 17 |
| 19 | 0 | 18 | 43 | 36 | 24 | 0 | 18 | 5 | 27 | 2 | 0 | 17 | 8 | 52 | 19 | 0 | 8 | 46 | 11 | 58 |
| 20 | 0 | 19 | 42 | 44 | 38 | 0 | 19 | 2 | 34 | 47 | 0 | 18 | 3 | 1 | 23 | 0 | 9 | 13 | 53 | 39 |
| 21 | 0 | 20 | 41 | 52 | 52 | 0 | 19 | 59 | 42 | 31 | 0 | 18 | 57 | 10 | 28 | 0 | 9 | 41 | 35 | 20 |
| 22 | 0 | 21 | 41 | 1 | 6 | 0 | 20 | 56 | 50 | 15 | 0 | 19 | 51 | 19 | 32 | 0 | 10 | 9 | 17 | 1 |
| 23 | 0 | 22 | 40 | 9 | 19 | 0 | 21 | 53 | 58 | 0 | 0 | 20 | 45 | 28 | 36 | 0 | 10 | 36 | 58 | 42 |
| 24 | 0 | 23 | 39 | 17 | 34 | 0 | 22 | 51 | 5 | 44 | 0 | 21 | 39 | 37 | 40 | 0 | 11 | 4 | 40 | 23 |
| 25 | 0 | 24 | 38 | 25 | 47 | 0 | 23 | 48 | 13 | 29 | 0 | 22 | 33 | 46 | 44 | 0 | 11 | 32 | 22 | 4 |
| 26 | 0 | 25 | 37 | 34 | 2 | 0 | 24 | 45 | 21 | 13 | 0 | 23 | 27 | 55 | 48 | 0 | 12 | 0 | 3 | 45 |
| 27 | 0 | 26 | 36 | 42 | 16 | 0 | 25 | 42 | 28 | 57 | 0 | 24 | 22 | 4 | 53 | 0 | 12 | 27 | 45 | 26 |
| 28 | 0 | 27 | 35 | 50 | 29 | 0 | 26 | 39 | 36 | 41 | 0 | 25 | 16 | 13 | 57 | 0 | 12 | 55 | 27 | 7 |
| 29 | 0 | 28 | 34 | 58 | 42 | 0 | 27 | 36 | 44 | 26 | 0 | 26 | 10 | 23 | 1 | 0 | 13 | 23 | 8 | 48 |
| 30 | 0 | 29 | 34 | 6 | 57 | 0 | 28 | 33 | 52 | 10 | 0 | 27 | 4 | 32 | 5 | 0 | 13 | 50 | 50 | 29 |
| 31 | 1 | 0 | 33 | 14 | 11 | 0 | 29 | 30 | 59 | 54 | 0 | 27 | 58 | 41 | 9 | 0 | 14 | 18 | 32 | 9 |

# Centra planetarum media in diebus / Argumentum veneris:–

| Di | Centrum Saturni | | | | | Centrum Jovis | | | | | Centrum Martis | | | | | Argumentum veneris | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | G | m | 2 | 3 | S | G | m | 2 | 3 | S | G | m | 2 | 3 | 2 | 3 | 4 |
| 1 | 0 | 0 | 2 | 0 | 29 | 0 | 0 | 4 | 59 | 10 | 0 | 0 | 31 | 26 | 33 | 0 | 5 | 42 |
| 2 | 0 | 0 | 4 | 0 | 59 | 0 | 0 | 9 | 58 | 19 | 0 | 1 | 2 | 53 | 6 | 0 | 11 | 24 |
| 3 | 0 | 0 | 6 | 1 | 28 | 0 | 0 | 14 | 57 | 29 | 0 | 1 | 34 | 19 | 39 | 0 | 17 | 6 |
| 4 | 0 | 0 | 8 | 1 | 58 | 0 | 0 | 19 | 56 | 39 | 0 | 2 | 5 | 46 | 12 | 0 | 22 | 48 |
| 5 | 0 | 0 | 10 | 2 | 27 | 0 | 0 | 24 | 55 | 48 | 0 | 2 | 37 | 12 | 45 | 0 | 28 | 30 |
| 6 | 0 | 0 | 12 | 2 | 57 | 0 | 0 | 29 | 54 | 58 | 0 | 3 | 8 | 39 | 18 | 0 | 34 | 12 |
| 7 | 0 | 0 | 14 | 3 | 26 | 0 | 0 | 34 | 54 | 8 | 0 | 3 | 40 | 5 | 51 | 0 | 39 | 54 |
| 8 | 0 | 0 | 16 | 3 | 55 | 0 | 0 | 39 | 53 | 17 | 0 | 4 | 11 | 32 | 24 | 0 | 45 | 36 |
| 9 | 0 | 0 | 18 | 4 | 25 | 0 | 0 | 44 | 52 | 27 | 0 | 4 | 42 | 58 | 57 | 1 | 51 | 18 |
| 10 | 0 | 0 | 20 | 4 | 55 | 0 | 0 | 49 | 51 | 37 | 0 | 5 | 14 | 25 | 30 | 1 | 57 | 0 |
| 11 | 0 | 0 | 22 | 5 | 24 | 0 | 0 | 54 | 50 | 46 | 0 | 5 | 45 | 52 | 3 | 1 | 2 | 42 |
| 12 | 0 | 0 | 24 | 5 | 54 | 0 | 0 | 59 | 49 | 56 | 0 | 6 | 17 | 18 | 36 | 1 | 8 | 24 |
| 13 | 0 | 0 | 26 | 6 | 23 | 0 | 1 | 4 | 48 | 5 | 0 | 6 | 48 | 45 | 9 | 1 | 14 | 6 |
| 14 | 0 | 0 | 28 | 6 | 53 | 0 | 1 | 9 | 48 | 15 | 0 | 7 | 20 | 11 | 42 | 1 | 19 | 48 |
| 15 | 0 | 0 | 30 | 7 | 23 | 0 | 1 | 14 | 47 | 24 | 0 | 7 | 51 | 38 | 15 | 1 | 25 | 30 |
| 16 | 0 | 0 | 32 | 7 | 52 | 0 | 1 | 19 | 46 | 34 | 0 | 8 | 23 | 4 | 48 | 1 | 31 | 12 |
| 17 | 0 | 0 | 34 | 8 | 21 | 0 | 1 | 24 | 45 | 44 | 0 | 8 | 54 | 31 | 20 | 1 | 36 | 54 |
| 18 | 0 | 0 | 36 | 8 | 51 | 0 | 1 | 29 | 44 | 54 | 0 | 9 | 25 | 57 | 53 | 1 | 42 | 36 |
| 19 | 0 | 0 | 38 | 9 | 20 | 0 | 1 | 34 | 44 | 3 | 0 | 9 | 57 | 24 | 26 | 1 | 48 | 18 |
| 20 | 0 | 0 | 40 | 9 | 50 | 0 | 1 | 39 | 43 | 13 | 0 | 10 | 28 | 50 | 59 | 1 | 54 | 0 |
| 21 | 0 | 0 | 42 | 10 | 19 | 0 | 1 | 44 | 42 | 23 | 0 | 11 | 0 | 17 | 32 | 2 | 59 | 42 |
| 22 | 0 | 0 | 44 | 10 | 49 | 0 | 1 | 49 | 41 | 32 | 0 | 11 | 31 | 44 | 5 | 2 | 5 | 24 |
| 23 | 0 | 0 | 46 | 11 | 18 | 0 | 1 | 54 | 40 | 42 | 0 | 12 | 3 | 10 | 38 | 2 | 11 | 6 |
| 24 | 0 | 0 | 48 | 11 | 48 | 0 | 1 | 59 | 39 | 52 | 0 | 12 | 34 | 37 | 11 | 2 | 16 | 48 |
| 25 | 0 | 0 | 50 | 12 | 17 | 0 | 2 | 4 | 39 | 1 | 0 | 13 | 6 | 3 | 44 | 2 | 22 | 30 |
| 26 | 0 | 0 | 52 | 12 | 47 | 0 | 2 | 9 | 38 | 11 | 0 | 13 | 37 | 30 | 17 | 2 | 28 | 12 |
| 27 | 0 | 0 | 54 | 13 | 16 | 0 | 2 | 14 | 37 | 21 | 0 | 14 | 8 | 56 | 50 | 2 | 33 | 54 |
| 28 | 0 | 0 | 56 | 13 | 46 | 0 | 2 | 19 | 36 | 30 | 0 | 14 | 40 | 23 | 23 | 2 | 39 | 36 |
| 29 | 0 | 0 | 58 | 14 | 15 | 0 | 2 | 24 | 35 | 40 | 0 | 15 | 11 | 49 | 56 | 2 | 45 | 18 |
| 30 | 0 | 1 | 0 | 14 | 44 | 0 | 2 | 29 | 34 | 50 | 0 | 15 | 43 | 16 | 29 | 2 | 51 | 0 |
| 31 | 0 | 1 | 2 | 15 | 14 | 0 | 2 | 34 | 33 | 59 | 0 | 16 | 14 | 43 | 2 | 2 | 56 | 42 |

# Tabula medii motus planetarum in horis et fractionibus

| Hore | Tabula augmenti stellarum fixarum | | | | Tabula accessionis et recessionis octave sphere | | | | Motus solis veneris et mercurii | | | | Tabula medii motus lune in horis | | | | Motus argumenti lune | | | | Tabula medii argumenti latitudinis lune | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G | M | 2 | 3 | G | M | 2 | 3 | G | M | 2 | 3 | G | M | 2 | 3 | G | M | 2 | 3 | G | M | 2 | 3 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 27 | 51 | 0 | 32 | 56 | 28 | 0 | 32 | 39 | 45 | 0 | 33 | 4 | 29 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 55 | 42 | 1 | 5 | 52 | 55 | 1 | 5 | 19 | 30 | 1 | 6 | 8 | 48 |
| 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 7 | 23 | 32 | 1 | 38 | 49 | 23 | 1 | 37 | 59 | 15 | 1 | 39 | 13 | 12 |
| 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 0 | 9 | 51 | 23 | 2 | 11 | 45 | 50 | 2 | 10 | 39 | 0 | 2 | 12 | 17 | 37 |
| 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 0 | 12 | 19 | 14 | 2 | 44 | 42 | 18 | 2 | 43 | 18 | 44 | 2 | 45 | 22 | 1 |
| 6 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 14 | 47 | 5 | 3 | 17 | 38 | 45 | 3 | 15 | 58 | 29 | 3 | 18 | 26 | 24 |
| 7 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 17 | 14 | 56 | 3 | 50 | 35 | 13 | 3 | 48 | 38 | 14 | 3 | 51 | 30 | 49 |
| 8 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 10 | 0 | 19 | 42 | 47 | 4 | 23 | 31 | 40 | 4 | 21 | 17 | 59 | 4 | 24 | 34 | 13 |
| 9 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 11 | 0 | 22 | 10 | 37 | 4 | 56 | 28 | 8 | 4 | 53 | 57 | 44 | 4 | 57 | 39 | 37 |
| 10 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 13 | 0 | 24 | 38 | 28 | 5 | 29 | 24 | 36 | 5 | 26 | 37 | 29 | 5 | 30 | 44 | 1 |
| 11 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 14 | 0 | 27 | 6 | 19 | 6 | 2 | 21 | 3 | 5 | 59 | 17 | 14 | 6 | 3 | 48 | 26 |
| 12 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 15 | 0 | 29 | 34 | 10 | 6 | 35 | 17 | 31 | 6 | 31 | 56 | 59 | 6 | 36 | 52 | 50 |
| 13 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 16 | 0 | 32 | 2 | 1 | 7 | 8 | 13 | 58 | 7 | 4 | 36 | 44 | 7 | 9 | 57 | 14 |
| 14 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 18 | 0 | 34 | 29 | 51 | 7 | 41 | 10 | 26 | 7 | 37 | 16 | 20 | 7 | 43 | 1 | 38 |
| 15 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 19 | 0 | 36 | 57 | 42 | 8 | 14 | 6 | 53 | 8 | 9 | 56 | 14 | 8 | 16 | 6 | 2 |
| 16 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 20 | 0 | 39 | 25 | 33 | 8 | 47 | 3 | 21 | 8 | 42 | 35 | 58 | 8 | 49 | 10 | 26 |
| 17 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 22 | 0 | 41 | 53 | 24 | 9 | 19 | 59 | 48 | 9 | 15 | 15 | 43 | 9 | 22 | 14 | 50 |
| 18 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 23 | 0 | 44 | 21 | 14 | 9 | 52 | 56 | 16 | 9 | 47 | 55 | 28 | 9 | 55 | 19 | 15 |
| 19 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 24 | 0 | 46 | 49 | 5 | 10 | 25 | 52 | 43 | 10 | 20 | 35 | 13 | 10 | 28 | 23 | 39 |
| 20 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 25 | 0 | 49 | 16 | 56 | 10 | 58 | 49 | 11 | 10 | 53 | 14 | 58 | 11 | 1 | 28 | 3 |
| 21 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 27 | 0 | 51 | 44 | 47 | 11 | 31 | 45 | 39 | 11 | 25 | 54 | 43 | 11 | 34 | 32 | 27 |
| 22 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 28 | 0 | 54 | 12 | 38 | 12 | 4 | 42 | 6 | 11 | 58 | 34 | 28 | 12 | 7 | 36 | 51 |
| 23 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 29 | 0 | 56 | 40 | 29 | 12 | 37 | 38 | 34 | 12 | 31 | 14 | 13 | 12 | 40 | 41 | 15 |
| 24 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 30 | 0 | 59 | 8 | 20 | 13 | 10 | 35 | 1 | 13 | 3 | 53 | 58 | 13 | 13 | 45 | 39 |
| 25 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 32 | 1 | 1 | 36 | 10 | 13 | 43 | 31 | 29 | 13 | 36 | 33 | 42 | 13 | 46 | 50 | 4 |
| 26 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 33 | 1 | 4 | 4 | 1 | 14 | 16 | 27 | 56 | 14 | 9 | 13 | 27 | 14 | 19 | 54 | 28 |
| 27 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 34 | 1 | 6 | 31 | 52 | 14 | 49 | 24 | 24 | 14 | 41 | 53 | 12 | 14 | 52 | 58 | 52 |
| 28 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 35 | 1 | 8 | 59 | 43 | 15 | 22 | 20 | 51 | 15 | 14 | 32 | 57 | 15 | 26 | 3 | 16 |
| 29 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 37 | 1 | 11 | 27 | 34 | 15 | 55 | 17 | 19 | 15 | 47 | 12 | 42 | 15 | 59 | 7 | 40 |
| 30 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 38 | 1 | 13 | 55 | 25 | 16 | 28 | 13 | 47 | 16 | 19 | 52 | 27 | 16 | 32 | 12 | 4 |

# Residuum tabule motuum in horis et aliis fractionibus

| | Motus capitis Draconis | | | | Medius motus Saturni | | | | Motus Jovis | | | | Motus Martis | | | | Argumentum Veneris | | | | Argumentum Mercurii | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 7 | 57 | 0 | 0 | 5 | 1 | 0 | 0 | 12 | 28 | 0 | 1 | 18 | 31 | 0 | 1 | 32 | 29 | 0 | 7 | 46 | 0 |
| 2 | 0 | 0 | 15 | 53 | 0 | 0 | 10 | 3 | 0 | 0 | 24 | 56 | 0 | 2 | 37 | 13 | 0 | 3 | 4 | 58 | 0 | 15 | 32 | 1 |
| 3 | 0 | 0 | 23 | 50 | 0 | 0 | 15 | 4 | 0 | 0 | 37 | 24 | 0 | 3 | 55 | 50 | 0 | 4 | 37 | 26 | 0 | 23 | 18 | 1 |
| 4 | 0 | 0 | 31 | 46 | 0 | 0 | 20 | 6 | 0 | 0 | 49 | 53 | 0 | 5 | 14 | 26 | 0 | 6 | 9 | 55 | 0 | 31 | 4 | 1 |
| 5 | 0 | 0 | 39 | 43 | 0 | 0 | 25 | 7 | 0 | 1 | 2 | 21 | 0 | 6 | 33 | 3 | 0 | 7 | 42 | 23 | 0 | 38 | 50 | 2 |
| 6 | 0 | 0 | 47 | 40 | 0 | 0 | 30 | 8 | 0 | 1 | 14 | 49 | 0 | 7 | 51 | 40 | 0 | 9 | 14 | 52 | 0 | 46 | 36 | 2 |
| 7 | 0 | 0 | 55 | 36 | 0 | 0 | 35 | 10 | 0 | 1 | 27 | 17 | 0 | 9 | 10 | 16 | 0 | 10 | 47 | 20 | 0 | 54 | 22 | 2 |
| 8 | 0 | 1 | 3 | 33 | 0 | 0 | 40 | 12 | 0 | 1 | 39 | 45 | 0 | 10 | 28 | 43 | 0 | 12 | 19 | 49 | 1 | 2 | 8 | 3 |
| 9 | 0 | 1 | 11 | 29 | 0 | 0 | 45 | 13 | 0 | 1 | 52 | 13 | 0 | 11 | 47 | 29 | 0 | 13 | 52 | 18 | 1 | 9 | 54 | 3 |
| 10 | 0 | 1 | 19 | 26 | 0 | 0 | 50 | 15 | 0 | 2 | 4 | 41 | 0 | 13 | 6 | 6 | 0 | 15 | 24 | 46 | 1 | 17 | 40 | 3 |
| 11 | 0 | 1 | 27 | 22 | 0 | 0 | 55 | 16 | 0 | 2 | 17 | 10 | 0 | 14 | 24 | 43 | 0 | 16 | 57 | 15 | 1 | 25 | 26 | 4 |
| 12 | 0 | 1 | 35 | 19 | 0 | 1 | 0 | 18 | 0 | 2 | 29 | 38 | 0 | 15 | 43 | 19 | 0 | 18 | 29 | 44 | 1 | 33 | 12 | 4 |
| 13 | 0 | 1 | 43 | 16 | 0 | 1 | 5 | 19 | 0 | 2 | 42 | 6 | 0 | 17 | 1 | 56 | 0 | 20 | 2 | 12 | 1 | 40 | 57 | 4 |
| 14 | 0 | 1 | 51 | 12 | 0 | 1 | 10 | 21 | 0 | 2 | 54 | 34 | 0 | 18 | 20 | 33 | 0 | 21 | 34 | 41 | 1 | 48 | 44 | 4 |
| 15 | 0 | 1 | 59 | 9 | 0 | 1 | 15 | 22 | 0 | 3 | 7 | 2 | 0 | 19 | 39 | 9 | 0 | 23 | 7 | 10 | 1 | 56 | 30 | 5 |
| 16 | 0 | 2 | 7 | 5 | 0 | 1 | 20 | 24 | 0 | 3 | 19 | 30 | 0 | 20 | 57 | 46 | 0 | 24 | 39 | 38 | 2 | 4 | 16 | 5 |
| 17 | 0 | 2 | 15 | 2 | 0 | 1 | 25 | 25 | 0 | 3 | 31 | 58 | 0 | 22 | 16 | 22 | 0 | 26 | 12 | 7 | 2 | 12 | 2 | 5 |
| 18 | 0 | 2 | 22 | 58 | 0 | 1 | 30 | 26 | 0 | 3 | 44 | 27 | 0 | 23 | 35 | 59 | 0 | 27 | 44 | 36 | 2 | 19 | 48 | 6 |
| 19 | 0 | 2 | 30 | 55 | 0 | 1 | 35 | 28 | 0 | 3 | 56 | 55 | 0 | 24 | 53 | 36 | 0 | 29 | 17 | 5 | 2 | 27 | 34 | 6 |
| 20 | 0 | 2 | 38 | 52 | 0 | 1 | 40 | 29 | 0 | 4 | 9 | 23 | 0 | 26 | 12 | 12 | 0 | 30 | 49 | 33 | 2 | 34 | 20 | 6 |
| 21 | 0 | 2 | 46 | 48 | 0 | 1 | 45 | 31 | 0 | 4 | 21 | 51 | 0 | 27 | 30 | 49 | 0 | 32 | 22 | 1 | 2 | 43 | 6 | 7 |
| 22 | 0 | 2 | 54 | 45 | 0 | 1 | 50 | 32 | 0 | 4 | 34 | 19 | 0 | 28 | 49 | 25 | 0 | 33 | 54 | 30 | 2 | 50 | 52 | 7 |
| 23 | 0 | 3 | 2 | 41 | 0 | 1 | 55 | 34 | 0 | 4 | 46 | 47 | 0 | 30 | 8 | 2 | 0 | 35 | 26 | 59 | 2 | 58 | 38 | 7 |
| 24 | 0 | 3 | 10 | 38 | 0 | 2 | 0 | 35 | 0 | 4 | 59 | 15 | 0 | 31 | 26 | 39 | 0 | 36 | 59 | 27 | 3 | 6 | 24 | 8 |
| 25 | 0 | 3 | 18 | 34 | 0 | 2 | 5 | 37 | 0 | 5 | 11 | 44 | 0 | 32 | 45 | 15 | 0 | 38 | 31 | 56 | 3 | 14 | 10 | 8 |
| 26 | 0 | 3 | 26 | 31 | 0 | 2 | 10 | 38 | 0 | 5 | 24 | 12 | 0 | 34 | 3 | 52 | 0 | 40 | 4 | 24 | 3 | 21 | 56 | 8 |
| 27 | 0 | 3 | 34 | 28 | 0 | 2 | 15 | 40 | 0 | 5 | 36 | 40 | 0 | 35 | 22 | 28 | 0 | 41 | 36 | 53 | 3 | 29 | 42 | 9 |
| 28 | 0 | 3 | 42 | 24 | 0 | 2 | 20 | 41 | 0 | 5 | 49 | 8 | 0 | 36 | 41 | 5 | 0 | 43 | 9 | 22 | 3 | 37 | 28 | 9 |
| 29 | 0 | 3 | 50 | 21 | 0 | 2 | 25 | 43 | 0 | 6 | 1 | 36 | 0 | 37 | 59 | 42 | 0 | 44 | 41 | 51 | 3 | 45 | 14 | 9 |
| 30 | 0 | 3 | 58 | 18 | 0 | 2 | 30 | 44 | 0 | 6 | 14 | 4 | 0 | 39 | 18 | 18 | 0 | 46 | 14 | 19 | 3 | 53 | 0 | 10 |
| | | G | 2 | 3 | M | 2 | 3 | 4 | M | 2 | 3 | 4 | M | 2 | 3 | 4 | M | 2 | 3 | 4 | M | 2 | 3 | 4 |

| 2 | 3 | 4 | | 2 | 3 | 4 | | 2 | 3 | 4 | | 2 | 3 | 4 | | 2 | 3 | 4 | | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 4 | | | 3 | 4 | | | 3 | 4 | | | 3 | 4 | | | 3 | 4 | | | 3 | 4 | |
| 4 | | | | 4 | | | | 4 | | | | 4 | | | | 4 | | | | 4 | | |

# Tabula medie opposicionis solis et lune in annis collectis

| Anni collecti | Tempus medie opposicionis solis et lune D | H | M | 2 | 3 | 4 | Medius motus solis et lune S | G | M | 2 | 3 | Medium argumentum lune S | G | M | 2 | 3 | Medius motus argumenti latitudinis lune S | G | M | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1429 | 19 | 21 | 10 | 23 | 17 | 35 | S | G | M | 2 | 3 | S | G | M | 2 | 3 | S | G | M | 2 | 3 |
| 1449 | 8 | 22 | 30 | 46 | 33 | 52 | 10 | 8 | 22 | 45 | 21 | 1 | 25 | 21 | 44 | 33 | 4 | 1 | 5 | 8 | 58 |
| 1469 | 27 | 12 | 35 | 32 | 53 | 8 | 9 | 27 | 44 | 21 | 14 | 10 | 12 | 13 | 12 | 7 | 4 | 16 | 41 | 49 | 40 |
| 1489 | 16 | 13 | 56 | 6 | 9 | 26 | 10 | 10 | 12 | 21 | 18 | 7 | 24 | 41 | 36 | 36 | 6 | 2 | 58 | 44 | 12 |
| 1509 | 5 | 15 | 16 | 39 | 25 | 43 | 10 | 5 | 33 | 57 | 11 | 4 | 11 | 33 | 0 | 31 | 6 | 18 | 35 | 24 | 57 |
| 1529 | 24 | 5 | 21 | 15 | 45 | 0 | 9 | 24 | 55 | 31 | 3 | 0 | 28 | 18 | 26 | 25 | 7 | 4 | 12 | 5 | 43 |
| 1549 | 13 | 6 | 41 | 49 | 1 | 17 | 10 | 13 | 23 | 33 | 8 | 10 | 10 | 52 | 44 | 58 | 8 | 20 | 29 | 0 | 14 |
| 1569 | 2 | 8 | 2 | 22 | 17 | 35 | 10 | 2 | 45 | 9 | 0 | 6 | 27 | 38 | 12 | 49 | 9 | 6 | 5 | 41 | 0 |
| 1589 | 20 | 22 | 6 | 58 | 36 | 51 | 9 | 22 | 6 | 44 | 53 | 3 | 18 | 23 | 36 | 43 | 9 | 21 | 42 | 21 | 45 |
| 1609 | 9 | 23 | 27 | 31 | 53 | 8 | 10 | 10 | 38 | 44 | 57 | 0 | 26 | 58 | 1 | 12 | 11 | 7 | 59 | 16 | 17 |
| 1629 | 28 | 13 | 32 | 8 | 12 | 25 | 9 | 29 | 46 | 20 | 50 | 9 | 13 | 43 | 25 | 6 | 11 | 23 | 35 | 57 | 2 |
| 1649 | 17 | 18 | 52 | 41 | 29 | 42 | 10 | 18 | 28 | 20 | 56 | 6 | 26 | 17 | 49 | 36 | 1 | 9 | 52 | 51 | 34 |
| 1669 | 6 | 16 | 13 | 14 | 45 | 0 | 10 | 7 | 45 | 56 | 41 | 3 | 13 | 3 | 13 | 30 | 1 | 25 | 29 | 32 | 20 |
| 1689 | 27 | 6 | 17 | 51 | 4 | 16 | 9 | 27 | 7 | 32 | 40 | 11 | 29 | 48 | 37 | 24 | 2 | 11 | 6 | 13 | 5 |
| 1709 | 14 | 7 | 38 | 24 | 20 | 33 | 10 | 15 | 75 | 32 | 44 | 9 | 12 | 23 | 1 | 53 | 3 | 27 | 23 | 7 | 37 |
| 1729 | 3 | 8 | 58 | 57 | 36 | 51 | 10 | 4 | 57 | 8 | 37 | 5 | 20 | 8 | 25 | 44 | 4 | 12 | 59 | 48 | 22 |
| 1749 | 21 | 23 | 3 | 33 | 56 | 7 | 9 | 24 | 15 | 44 | 29 | 2 | 15 | 53 | 49 | 42 | 4 | 28 | 36 | 29 | 8 |
| 1769 | 11 | 0 | 24 | 7 | 12 | 25 | 10 | 13 | 46 | 44 | 35 | 11 | 28 | 28 | 14 | 11 | 6 | 14 | 53 | 23 | 39 |
| 1789 | 0 | 1 | 44 | 40 | 28 | 42 | 10 | 2 | 8 | 20 | 26 | 8 | 15 | 13 | 38 | 6 | 7 | 0 | 30 | 4 | 25 |
| 1809 | 18 | 15 | 49 | 16 | 41 | 58 | 9 | 21 | 20 | 50 | 19 | 5 | 1 | 59 | 2 | 0 | 7 | 16 | 6 | 45 | 10 |
| | | | | | | | 10 | 9 | 51 | 46 | 23 | 2 | 18 | 33 | 26 | 29 | 9 | 2 | 27 | 39 | 42 |

# Tabula medie coniunctionis solis et lune in annis collectis

| Anni collecti | Medie coniunctiones solis et lune D | H | M | 2 | 3 | 4 | Motus solis et lune S | G | M | 2 | 3 | Argumentum lune S | G | M | 2 | 3 | Argumentum latitudinis lune S | G | M | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1429 | 5 | 2 | 44 | 21 | 40 | 5 | 9 | 23 | 49 | 33 | 15 | 7 | 12 | 33 | 17 | 55 | 9 | 15 | 45 | 2 | 1 |
| 1449 | 23 | 16 | 52 | 58 | 5 | 22 | 10 | 12 | 17 | 33 | 19 | 4 | 25 | 7 | 42 | 25 | 11 | 2 | 1 | 56 | 33 |
| 1469 | 12 | 18 | 13 | 31 | 21 | 39 | 10 | 1 | 39 | 9 | 13 | 1 | 11 | 53 | 6 | 19 | 11 | 17 | 38 | 37 | 19 |
| 1489 | 1 | 19 | 34 | 4 | 37 | 57 | 9 | 21 | 0 | 45 | 5 | 9 | 29 | 38 | 30 | 13 | 0 | 3 | 15 | 18 | 4 |
| 1509 | 20 | 9 | 38 | 40 | 57 | 13 | 10 | 9 | 28 | 45 | 9 | 7 | 11 | 12 | 56 | 43 | 1 | 19 | 32 | 12 | 30 |
| 1529 | 9 | 10 | 59 | 18 | 13 | 30 | 9 | 28 | 50 | 21 | 2 | 3 | 27 | 58 | 18 | 37 | 2 | 5 | 8 | 53 | 21 |
| 1549 | 28 | 1 | 3 | 50 | 32 | 47 | 10 | 17 | 18 | 21 | 6 | 1 | 10 | 32 | 43 | 6 | 3 | 21 | 25 | 47 | 53 |
| 1569 | 17 | 2 | 24 | 23 | 49 | 4 | 10 | 6 | 39 | 56 | 55 | 9 | 27 | 18 | 7 | 0 | 4 | 7 | 2 | 28 | 38 |
| 1589 | 6 | 3 | 44 | 57 | 5 | 22 | 9 | 26 | 1 | 32 | 51 | 6 | 14 | 3 | 30 | 55 | 4 | 22 | 39 | 9 | 24 |
| 1609 | 24 | 17 | 40 | 33 | 26 | 38 | 10 | 14 | 29 | 32 | 56 | 3 | 20 | 37 | 55 | 24 | 6 | 8 | 56 | 3 | 56 |
| 1629 | 13 | 19 | 10 | 6 | 40 | 55 | 10 | 3 | 51 | 8 | 44 | 0 | 13 | 23 | 19 | 18 | 6 | 24 | 32 | 44 | 41 |
| 1649 | 2 | 20 | 30 | 39 | 57 | 13 | 9 | 23 | 12 | 44 | 41 | 9 | 0 | 8 | 43 | 12 | 7 | 10 | 9 | 25 | 24 |
| 1669 | 21 | 10 | 35 | 16 | 16 | 29 | 10 | 11 | 40 | 44 | 45 | 6 | 12 | 43 | 7 | 42 | 8 | 26 | 26 | 19 | 58 |
| 1689 | 10 | 11 | 55 | 49 | 32 | 47 | 10 | 1 | 2 | 20 | 38 | 2 | 29 | 28 | 31 | 36 | 9 | 12 | 3 | 0 | 44 |
| 1709 | 29 | 2 | 10 | 25 | 52 | 3 | 10 | 19 | 30 | 20 | 42 | 0 | 12 | 2 | 50 | 5 | 10 | 28 | 10 | 55 | 15 |
| 1729 | 18 | 3 | 20 | 50 | 8 | 20 | 10 | 8 | 51 | 56 | 35 | 8 | 28 | 48 | 19 | 59 | 11 | 13 | 56 | 36 | 1 |
| 1749 | 7 | 4 | 41 | 32 | 26 | 38 | 9 | 28 | 13 | 32 | 28 | 5 | 15 | 33 | 43 | 56 | 11 | 29 | 33 | 16 | 46 |
| 1769 | 25 | 18 | 46 | 8 | 43 | 54 | 10 | 16 | 41 | 32 | 32 | 2 | 28 | 8 | 8 | 23 | 1 | 15 | 50 | 11 | 18 |
| 1789 | 14 | 20 | 6 | 42 | 0 | 12 | 10 | 6 | 3 | 8 | 25 | 11 | 14 | 53 | 32 | 17 | 2 | 1 | 26 | 52 | 4 |
| 1809 | 3 | 21 | 27 | 15 | 16 | 29 | 9 | 25 | 24 | 44 | 17 | 8 | 1 | 38 | 50 | 13 | 2 | 17 | 3 | 32 | 49 |

# Tabula medie coniunctionis et opposicionis solis et lune in annis expansis

| Anni | Tempus coniunctionis et opposicionis solis et lune D | H | M | 2 | 3 | 4 | Motus solis et lune S | G | M | 2 | 3 | Argumentum lune S | G | M | 2 | 3 | Argumentum latitudinis lune S | G | M | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 20 | 8 | 48 | 36 | 35 | 46 | 11 | 19 | 16 | 50 | 20 | 10 | 9 | 48 | 6 | 59 | 0 | 8 | 2 | 45 | 13 |
| 2 | 9 | 17 | 37 | 13 | 11 | 33 | 11 | 8 | 33 | 40 | 35 | 8 | 19 | 36 | 13 | 59 | 0 | 16 | 5 | 30 | 26 |
| 3 | 28 | 15 | 9 | 52 | 50 | 18 | 11 | 26 | 50 | 55 | 10 | 7 | 29 | 13 | 21 | 33 | 1 | 24 | 48 | 29 | 26 |
| 4 | 16 | 27 | 58 | 29 | 26 | 4 | 11 | 16 | 13 | 45 | 30 | 6 | 5 | 1 | 28 | 33 | 2 | 2 | 5 | 39 | 39 |
| 5 | 6 | 8 | 47 | 6 | 1 | 50 | 11 | 5 | 30 | 35 | 49 | 4 | 18 | 49 | 35 | 32 | 2 | 10 | 5 | [illegible] | 12 |
| 6 | 24 | 6 | 19 | 45 | 40 | 35 | 11 | 24 | 53 | 50 | 21 | 3 | 20 | 26 | 43 | 7 | 3 | 19 | 36 | [illegible] | [illegible] |
| 7 | 14 | 15 | 8 | 22 | 16 | 22 | 11 | 13 | 10 | 40 | 40 | 2 | 0 | 14 | 50 | 6 | 3 | 27 | 39 | 44 | 4 |
| 8 | 2 | 23 | 56 | 58 | 72 | 8 | 11 | 2 | 27 | 31 | 0 | 0 | 10 | 2 | 51 | 6 | 4 | 5 | 42 | 29 | 17 |
| 9 | 21 | 21 | 29 | 38 | 30 | 53 | 11 | 20 | 50 | 45 | 31 | 11 | 15 | 40 | 4 | 40 | 5 | 14 | 25 | 25 | 17 |
| 10 | 11 | 6 | 18 | 15 | 6 | 40 | 11 | 10 | 7 | 35 | 51 | 9 | 25 | 28 | 11 | 40 | 5 | 22 | 28 | 13 | 30 |
| 11 | 30 | 3 | 50 | 58 | 45 | 25 | 11 | 28 | 30 | 50 | 22 | 9 | 1 | 5 | 19 | 14 | 7 | 1 | 11 | 12 | 29 |
| 12 | 18 | 12 | 39 | 35 | 21 | 11 | 11 | 17 | 47 | 40 | 41 | 7 | 10 | 53 | 26 | 14 | 7 | 9 | 13 | 57 | 42 |
| 13 | 7 | 21 | 28 | 7 | 56 | 57 | 11 | 7 | 4 | 31 | 1 | 5 | 20 | 41 | 33 | 13 | 7 | 17 | 16 | 42 | 55 |
| 14 | 26 | 10 | 0 | 47 | 35 | 42 | 11 | 25 | 27 | 45 | 32 | 4 | 26 | 18 | 40 | 47 | 8 | 25 | 59 | 41 | 52 |
| 15 | 16 | 3 | 40 | 28 | 11 | 29 | 11 | 14 | 44 | 35 | 52 | 3 | 6 | 6 | 47 | 47 | 9 | 4 | 2 | 27 | 8 |
| 16 | 4 | 12 | 38 | 0 | 47 | 15 | 11 | 4 | 1 | 26 | 11 | 1 | 15 | 58 | 50 | 46 | 9 | 12 | 5 | 12 | 23 |
| 17 | 23 | 10 | 50 | 40 | 26 | 0 | 11 | 22 | 24 | 40 | 42 | 0 | 21 | 32 | 2 | 21 | 10 | 20 | 41 | 11 | 20 |
| 18 | 12 | 18 | 59 | 17 | 1 | 46 | 11 | 11 | 41 | 31 | 2 | 11 | 1 | 20 | 9 | 20 | 10 | 28 | 50 | 56 | 33 |
| 19 | 2 | 3 | 47 | 53 | 37 | 33 | 11 | 0 | 58 | 21 | 21 | 9 | 11 | 8 | 16 | 20 | 11 | 6 | 53 | 41 | 46 |
| 20 | 20 | 7 | 20 | 33 | 16 | 18 | 11 | 19 | 21 | 35 | 53 | 8 | 16 | 45 | 23 | 58 | 0 | 14 | 36 | 40 | 46 |

## Tabula medie coniunctionis et oppositionis ☉ et ☽ in mensibus

| Nomina mensium | Dies lune | Tempus medie coniunctionis et oppositionis ☉ et ☽ in mensibus: ho | m | 2 | 3 | 4 | Dies solis | Medius motus ☉ et ☽ in mensibus: s | g | m | 2 | 3 | Medium argumentum ☽: s | g | m | 2 | 3 | Medium argumentum latitudinis lune: s | g | m | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Februarius | 29 | 12 | 44 | 3 | 2 | 49 | 31 | 0 | 29 | 6 | 24 | 12 | 0 | 25 | 49 | 0 | 35 | 1 | 0 | 40 | 13 | 46 |
| Marcius | 59 | 1 | 28 | 6 | 4 | 58 | 59 | 1 | 28 | 12 | 48 | 23 | 1 | 21 | 38 | 1 | 10 | 2 | 1 | 20 | 27 | 32 |
| Aprilis | 88 | 14 | 12 | 9 | 5 | 47 | 90 | 2 | 27 | 19 | 12 | 37 | 2 | 17 | 27 | 1 | 44 | 3 | 2 | 0 | 41 | 18 |
| Maius | 118 | 2 | 56 | 12 | 11 | 44 | 120 | 3 | 26 | 25 | 36 | 41 | 3 | 13 | 16 | 2 | 20 | 4 | 2 | 40 | 55 | 4 |
| Iunius | 147 | 15 | 40 | 15 | 14 | 40 | 151 | 4 | 25 | 32 | 0 | 48 | 4 | 9 | 5 | 2 | 55 | 5 | 3 | 21 | 5 | 40 |
| Iulius | 177 | 4 | 25 | 18 | 17 | 43 | 181 | 5 | 25 | 38 | 24 | 10 | 5 | 9 | 52 | 3 | 30 | 6 | 4 | 1 | 22 | 51 |
| Augustus | 206 | 17 | 5 | 21 | 20 | 45 | 212 | 6 | 23 | 44 | 49 | 21 | 6 | 0 | 53 | 4 | 5 | 7 | 4 | 41 | 36 | 23 |
| September | 236 | 5 | 52 | 44 | 25 | 41 | 243 | 7 | 22 | [illegible] | 13 | 33 | 6 | 26 | 52 | 4 | 49 | 8 | 5 | 21 | 50 | 9 |
| October | 265 | 18 | 36 | 27 | 26 | 40 | 273 | 8 | 21 | 57 | 31 | 44 | 7 | 22 | 24 | 4 | 15 | 9 | 6 | 2 | 3 | 55 |
| November | 295 | 7 | 20 | 30 | 29 | 49 | 304 | 9 | 21 | 4 | 1 | 56 | 8 | 15 | 10 | 5 | 50 | 10 | 6 | 42 | 18 | 21 |
| December | 324 | 20 | 4 | 33 | 32 | 53 | 334 | 10 | 20 | 10 | 26 | 8 | 9 | 13 | 50 | 6 | 25 | 11 | 7 | 22 | 31 | 27 |
| Ianuarius | 354 | 8 | 48 | 36 | 37 | [illegible] | 365 | 11 | 19 | 16 | 50 | 20 | 10 | 9 | 45 | 6 | 50 | 0 | 8 | 2 | 44 | 13 |

364

| | D | ho | m | 2 | 3 | 4 | s | g | m | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ca coniunctionis ad oppositionem | 14 | 18 | 22 | 1 | 31 | 29 | 0 | 14 | 33 | 12 | 6 |
| | 7 | 9 | 11 | 0 | 44 | 44 | 0 | 7 | 16 | 30 | 3 |
| Ca o ad | | | | | | | 1 | 20 | 4 | 48 | 55 |

| | s | g | m | 2 | s | g | m | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|
| a o ad o | 6 | 12 | 48 | 30 | 17 | 5 | 14 | 20 | 6 | 33 |
| a o ad | 5 | 6 | 27 | 14 | 8 | 5 | 7 | 40 | 3 | 21 |

Anni o a o: 0 14 33 10 26

## Tabula augium planetarum ad annos Christi collectos

| Anni collecti | Auges Solis et Veneris: s | g | m | 2 | 3 | Saturni: s | g | m | 2 | 3 | Auges Iovis: s | g | m | 2 | 3 | Auges Martis: s | g | m | 2 | 3 | Auges Mercurii: s | g | m | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1428 | 3 | 0 | 30 | 7 | 16 | 8 | 12 | 28 | 26 | 16 | 5 | 22 | 41 | 44 | 16 | 4 | 14 | 15 | 57 | 16 | 6 | 29 | 44 | 17 | 16 |
| 1448 | 3 | 0 | 41 | 45 | 21 | 8 | 12 | 20 | 4 | 21 | 5 | 22 | 57 | 22 | 21 | 4 | 14 | 25 | 57 | 21 | 6 | 29 | 57 | 57 | 21 |
| 1468 | 3 | 0 | 53 | 13 | 34 | 8 | 12 | 51 | 32 | 34 | 5 | 23 | 4 | 50 | 34 | 4 | 14 | 40 | 3 | 34 | 7 | 0 | 7 | 33 | 34 |
| 1488 | 3 | 1 | 4 | 31 | 33 | 8 | 13 | 2 | 50 | 33 | 5 | 23 | 16 | 8 | 33 | 4 | 14 | 51 | 21 | 33 | 7 | 0 | 18 | 41 | 33 |
| 1508 | 3 | 1 | 57 | 38 | 51 | 8 | 13 | 13 | [illegible] | 51 | 5 | 23 | 21 | 15 | 51 | 4 | 15 | 2 | 28 | 51 | 7 | 0 | 29 | 44 | 51 |
| 1528 | 3 | 1 | 43 | 26 | 34 | 8 | 13 | 24 | 57 | 34 | 5 | 23 | 38 | 13 | 34 | 4 | 15 | 13 | 26 | 34 | 7 | 0 | 40 | 26 | 34 |
| 1548 | 3 | 1 | 51 | 38 | 40 | 8 | 13 | 59 | 43 | 40 | 5 | 23 | 49 | 1 | 40 | 4 | 15 | 28 | 14 | 40 | 7 | 0 | 51 | 34 | 40 |
| 1568 | 3 | 1 | 45 | 3 | 16 | 8 | 13 | 40 | 22 | 16 | 5 | 23 | 50 | 40 | 16 | 4 | 15 | 39 | 57 | 16 | 7 | 1 | 2 | 13 | 16 |
| 1588 | 3 | 1 | 57 | 31 | 28 | 8 | 13 | 56 | 50 | 28 | 5 | 24 | 10 | 8 | 28 | 4 | 15 | 41 | 51 | 28 | 7 | 1 | 12 | 41 | 28 |
| 1608 | 3 | 2 | 8 | 26 | 22 | 8 | 14 | 7 | 5 | 22 | 5 | 24 | 20 | 33 | 22 | 4 | 15 | 56 | 36 | 22 | 7 | 1 | 22 | 56 | 22 |
| 1628 | 3 | 2 | 15 | 52 | 12 | 8 | 14 | 17 | 11 | 12 | 5 | 24 | 30 | 29 | 12 | 4 | 16 | 5 | 42 | 12 | 7 | 1 | 33 | 2 | 12 |
| 1648 | 3 | 2 | 28 | 45 | 38 | 8 | 14 | 21 | 7 | 38 | 5 | 24 | 40 | 27 | 38 | 4 | 16 | 15 | 58 | 38 | 7 | 1 | 43 | 48 | 38 |
| 1668 | 3 | 2 | [illegible] | 32 | 33 | 8 | 14 | 36 | 43 | 33 | 5 | 24 | 50 | 11 | 33 | 4 | 16 | 24 | 28 | 33 | 7 | 1 | 52 | 48 | 33 |
| 1688 | 3 | 2 | 55 | 9 | 41 | 8 | 14 | 46 | 25 | 41 | 5 | 24 | 59 | 46 | 41 | 4 | 16 | 35 | 59 | 41 | 7 | 2 | 2 | 19 | 41 |
| 1708 | 3 | 2 | [illegible] | 38 | 10 | 8 | 14 | 47 | 13 | 10 | 5 | 25 | 9 | 11 | 10 | 4 | 16 | 45 | 24 | 10 | 7 | 2 | 11 | 44 | 10 |
| 1728 | 3 | 3 | 6 | 45 | 5 | 8 | 15 | 5 | 7 | 5 | 5 | 25 | 18 | 25 | 5 | 4 | 16 | 53 | 35 | 5 | 7 | 2 | 20 | 45 | 5 |
| 1748 | 3 | 3 | 5 | 59 | 25 | 8 | 15 | 14 | 10 | 25 | 5 | 25 | 27 | 28 | 25 | 4 | 17 | 2 | 41 | 25 | 7 | 2 | 30 | 1 | 25 |
| 1768 | 3 | 3 | 20 | 44 | 11 | 8 | 15 | 23 | 3 | 11 | 5 | 25 | 36 | 21 | 11 | 4 | 17 | 11 | 30 | 11 | 7 | 2 | 38 | 48 | 11 |
| 1788 | 3 | 3 | 33 | 26 | 23 | 8 | 15 | 31 | 41 | 23 | 5 | 25 | 45 | 3 | 23 | 4 | 17 | 20 | 16 | 23 | 7 | 2 | 47 | 36 | 23 |
| 1808 | 3 | 3 | 41 | 58 | 1 | 8 | 15 | 40 | 17 | 1 | 5 | 25 | 53 | 25 | 1 | 4 | 17 | 28 | 47 | 1 | 7 | 2 | 56 | 8 | 1 |

26

38

# Tabula Augium planetarum in Annis expansis

| Anni expansi | 1428 S | G | M | 1448 S | G | M | 1468 S | G | M | 1488 S | G | M | 1508 S | G | M | 1528 S | G | M | 1548 S | G | M | 1568 S | G | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 37 | 13 | 0 | 34 | 42 | 0 | 34 | 15 | 0 | 33 | 44 | 0 | 33 | 13 | 0 | 32 | 45 | 0 | 32 | 14 | 0 | 31 | 50 |
| 2 | 1 | 10 | 26 | 1 | 9 | 25 | 1 | 8 | 29 | 1 | 7 | 27 | 1 | 6 | 26 | 1 | 5 | 30 | 1 | 4 | 31 | 1 | 3 | 39 |
| 3 | 1 | 45 | 39 | 1 | 44 | 7 | 1 | 42 | 44 | 1 | 41 | 11 | 1 | 39 | 39 | 1 | 38 | 15 | 1 | 36 | 52 | 1 | 35 | 27 |
| 4 | 2 | 20 | 58 | 2 | 18 | 55 | 2 | 17 | 4 | 2 | 15 | 0 | 2 | 12 | 57 | 2 | 11 | 6 | 2 | 9 | 0 | 2 | 6 | 51 |
| 5 | 2 | 56 | 12 | 2 | 55 | 37 | 2 | 51 | 18 | 2 | 48 | 44 | 2 | 45 | 50 | 2 | 43 | 24 | 2 | 40 | 50 | 2 | 38 | 9 |
| 6 | 3 | 31 | 25 | 3 | 28 | 20 | 3 | 25 | 24 | 3 | 22 | 2 | 3 | 18 | 44 | 3 | 15 | 42 | 3 | 12 | 40 | 3 | 9 | 28 |
| 7 | 4 | 6 | 32 | 4 | 2 | 42 | 3 | 59 | 8 | 3 | 55 | 14 | 3 | 51 | 20 | 3 | 47 | 49 | 3 | 44 | 29 | 3 | 40 | 47 |
| 8 | 4 | 41 | 21 | 4 | 37 | 2 | 4 | 32 | 57 | 4 | 28 | 33 | 4 | 24 | 19 | 4 | 20 | 24 | 4 | 16 | 24 | 4 | 12 | 11 |
| 9 | 5 | 16 | 3 | 5 | 11 | 16 | 5 | 6 | 41 | 5 | 1 | 40 | 4 | 57 | 5 | 4 | 52 | 39 | 4 | 48 | 14 | 4 | 43 | 30 |
| 10 | 5 | 50 | 45 | 5 | 45 | 31 | 5 | 40 | 24 | 5 | 36 | 55 | 5 | 29 | 50 | 5 | 24 | 57 | 5 | 20 | 4 | 5 | 14 | 49 |
| 11 | 6 | 25 | 27 | 6 | 19 | 45 | 6 | 14 | 8 | 6 | 8 | 12 | 6 | 2 | 35 | 5 | 57 | 14 | 5 | 51 | 53 | 5 | 40 | 7 |
| 12 | 7 | 0 | 17 | 6 | 58 | 4 | 6 | 47 | 51 | 6 | 41 | 30 | 6 | 35 | 25 | 6 | 29 | 31 | 6 | 23 | 46 | 6 | 17 | 31 |
| 13 | 7 | 34 | 58 | 7 | 25 | 20 | 7 | 21 | 41 | 7 | 14 | 43 | 7 | 8 | 10 | 7 | 1 | 54 | 6 | 55 | 38 | 6 | 48 | 50 |
| 14 | 8 | 9 | 40 | 8 | 2 | 35 | 7 | 55 | 25 | 7 | 47 | 50 | 7 | 40 | 56 | 7 | 34 | 11 | 7 | 27 | 27 | 7 | 20 | 9 |
| 15 | 8 | 44 | 22 | 8 | 35 | 49 | 8 | 29 | 9 | 8 | 41 | 9 | 8 | 13 | 41 | 8 | 6 | 29 | 7 | 59 | 57 | 7 | 51 | 28 |
| 16 | 9 | 19 | 10 | 9 | 11 | 9 | 9 | 2 | 48 | 8 | 54 | 27 | 8 | 46 | 31 | 8 | 38 | 52 | 8 | 31 | 12 | 8 | 22 | 52 |
| 17 | 9 | 53 | 52 | 9 | 45 | 28 | 9 | 36 | 42 | 9 | 27 | 40 | 9 | 19 | 16 | 9 | 11 | 9 | 9 | 3 | 1 | 8 | 54 | 10 |
| 18 | 10 | 28 | 35 | 10 | 19 | 38 | 10 | 10 | 25 | 10 | 0 | 43 | 9 | 52 | 2 | 9 | 43 | 20 | 9 | 35 | 51 | 9 | 25 | 29 |
| 19 | 11 | 3 | 17 | 10 | 50 | 43 | 10 | 44 | 9 | 10 | 35 | 6 | 10 | 24 | 47 | 10 | 14 | 44 | 10 | 6 | 41 | 9 | 50 | 48 |
| 20 | 11 | 38 | 5 | 11 | [illegible] | 13 | 11 | 17 | 58 | 11 | 7 | 24 | 10 | 57 | 31 | 10 | 48 | 0 | 10 | 38 | 36 | 10 | 28 | 12 |

| Anni expansi | 1588 S | G | M | 1608 S | G | M | 1628 S | G | M | 1648 S | G | M | 1668 S | G | M | 1688 S | G | M | 1708 S | G | M | 1728 S | G | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 31 | 19 | 0 | 30 | 37 | 0 | 30 | 54 | 0 | 29 | 37 | 0 | 28 | 49 | 0 | 28 | 14 | 0 | 27 | 43 | 0 | 27 | 12 |
| 2 | 1 | 2 | 38 | 1 | 1 | 13 | 1 | 0 | 8 | 0 | 58 | 53 | 0 | 57 | 34 | 0 | 56 | 28 | 0 | 55 | 26 | 0 | 54 | 29 |
| 3 | 1 | 33 | 31 | 1 | 31 | 27 | 1 | 29 | 54 | 1 | 28 | 8 | 1 | 26 | 18 | 1 | 24 | 41 | 1 | 23 | 9 | 1 | 21 | 36 |
| 4 | 2 | 4 | 15 | 2 | 1 | 46 | 1 | 59 | 44 | 1 | 57 | 28 | 1 | 55 | 8 | 1 | 53 | 0 | 1 | 50 | 56 | 1 | 48 | 53 |
| 5 | 2 | 38 | 54 | 2 | 32 | 0 | 2 | 29 | 31 | 2 | 26 | 44 | 2 | 23 | 52 | 2 | 21 | 14 | 2 | 18 | 39 | 2 | 15 | 5 |
| 6 | 3 | 5 | 32 | 3 | 2 | 19 | 2 | 59 | 18 | 2 | 55 | 59 | 2 | 52 | 37 | 2 | 49 | 27 | 2 | 46 | 22 | 2 | 43 | 17 |
| 7 | 3 | 36 | 11 | 3 | 32 | 28 | 3 | 29 | 4 | 3 | 25 | 15 | 3 | 21 | 22 | 3 | 17 | 41 | 3 | 14 | 5 | 3 | 10 | 29 |
| 8 | 4 | 6 | 55 | 4 | 2 | 41 | 3 | 58 | 55 | 3 | 54 | 35 | 3 | 50 | 11 | 3 | 45 | 49 | 3 | 41 | 53 | 3 | 37 | 40 |
| 9 | 4 | 37 | 34 | 4 | 33 | 1 | 4 | 28 | 41 | 4 | 23 | 50 | 4 | 18 | 56 | 4 | 14 | 13 | 4 | 9 | 36 | 4 | 4 | 58 |
| 10 | 5 | 8 | 12 | 5 | 3 | 15 | 4 | 58 | 28 | 4 | 53 | 6 | 4 | 47 | 40 | 4 | 42 | 27 | 4 | 37 | 19 | 4 | 32 | 10 |
| 11 | 5 | 38 | 51 | 5 | 33 | 29 | 5 | 28 | 14 | 5 | 22 | 21 | 5 | 16 | 25 | 5 | 10 | 41 | 5 | 5 | 1 | 4 | 59 | 22 |
| 12 | 6 | 9 | 35 | 6 | 3 | 44 | 5 | 58 | 5 | 5 | 51 | 42 | 5 | 45 | 18 | 5 | 38 | 49 | 5 | 32 | 49 | 5 | 25 | 30 |
| 13 | 6 | 40 | 33 | 6 | 34 | 2 | 6 | 27 | 51 | 6 | 20 | 57 | 6 | 13 | 59 | 6 | 7 | 13 | 6 | 0 | 32 | 5 | 53 | 51 |
| 14 | 7 | 10 | 52 | 7 | 4 | 16 | 6 | 57 | 38 | 6 | 50 | 13 | 6 | 42 | 43 | 6 | 35 | 21 | 6 | 28 | 15 | 6 | 21 | 3 |
| 15 | 7 | 41 | 31 | 7 | 35 | 30 | 7 | 27 | 24 | 7 | 19 | 28 | 7 | 11 | 28 | 7 | 3 | 41 | 6 | 55 | 58 | 6 | 48 | 15 |
| 16 | 8 | 12 | 14 | 8 | 4 | 49 | 7 | 57 | 15 | 7 | 48 | 46 | 7 | 40 | 17 | 7 | 31 | 49 | 7 | 23 | 45 | 7 | 14 | 32 |
| 17 | 8 | 42 | 53 | 8 | 35 | 3 | 8 | 25 | 1 | 8 | 18 | 4 | 8 | 9 | 2 | 8 | 0 | 13 | 7 | 51 | 28 | 7 | 42 | 44 |
| 18 | 9 | 13 | 32 | 9 | 5 | 14 | 8 | 56 | 28 | 8 | 41 | 19 | 8 | 31 | 41 | 8 | 28 | 21 | 8 | 19 | 11 | 8 | 9 | 48 |
| 19 | 9 | 44 | 11 | 9 | 34 | 31 | 9 | 26 | 34 | 9 | 16 | 37 | 9 | 6 | 31 | 9 | 50 | 40 | 8 | 46 | 38 | 8 | 36 | 34 |
| 20 | 10 | 15 | 55 | 10 | 5 | 50 | 9 | 56 | 25 | 9 | 47 | 57 | 9 | 34 | 8 | 9 | 25 | 29 | 9 | 13 | 55 | 9 | 3 | 21 |

| | 1748 S | G | M | 1768 S | G | M | 1788 S | G | M |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 26 | 41 | 0 | 26 | 10 | 0 | 25 | 40 |
| 2 | 0 | 53 | 23 | 0 | 52 | 21 | 0 | 51 | 19 |
| 3 | 1 | 20 | 4 | 1 | 18 | 31 | 1 | 16 | 59 |
| 4 | 1 | 46 | 49 | 1 | 44 | 40 | 1 | 42 | 43 |
| 5 | 2 | 13 | 31 | 2 | 10 | 56 | 2 | 8 | 22 |
| 6 | 2 | 40 | 12 | 2 | 37 | 7 | 2 | 34 | 2 |
| 7 | 3 | 6 | 53 | 3 | 3 | 17 | 2 | 59 | 41 |
| 8 | 3 | 33 | 39 | 3 | 29 | 32 | 3 | 25 | 24 |
| 9 | 4 | 0 | 20 | 3 | 55 | 53 | 3 | 51 | 5 |
| 10 | 4 | 27 | 1 | 4 | 21 | 53 | 4 | 16 | 44 |
| 11 | 4 | 53 | 43 | 4 | 48 | 3 | 4 | 42 | 28 |
| 12 | 5 | 20 | 25 | 5 | 14 | 15 | 5 | 8 | 8 |
| 13 | 5 | 47 | 10 | 5 | 40 | 29 | 5 | 33 | 47 |
| 14 | 6 | 13 | 51 | 6 | 6 | 39 | 5 | 59 | 21 |
| 15 | 6 | 40 | 32 | 6 | 32 | 49 | 6 | 25 | 7 |
| 16 | 7 | 7 | 14 | 6 | 59 | 4 | 6 | 50 | 50 |
| 17 | 7 | 33 | 59 | 7 | 25 | 9 | 7 | 16 | 7 |
| 18 | 8 | 0 | 21 | 7 | 50 | 49 | 7 | 41 | 16 |
| 19 | 8 | 26 | 32 | 8 | 16 | 45 | 8 | 6 | 24 |
| 20 | 8 | 52 | 46 | 8 | 42 | 12 | 8 | 31 | 38 |

## Tabula augium planetarum in mensibus in anno communi

| | Tabula augium in mensibus S | 2 | 3 | 4 | Tabula centri in anno communi S | G | M | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 5 | 49 | 37 | 1 |
| Januarius | 0 | 2 | 56 | 45 | 11 | 28 | 30 | 29 | 52 |
| Februarius | 0 | 5 | 36 | 19 | 1 | 4 | 20 | 4 | 51 |
| Marcius | 0 | 8 | 33 | 2 | 1 | 14 | 46 | 46 | 41 |
| Aprilis | 0 | 11 | 24 | 2 | 2 | 21 | 36 | 21 | 32 |
| Maius | 0 | 14 | 20 | 44 | 3 | 3 | 3 | 3 | 10 |
| Junius | 0 | 17 | 11 | 47 | 4 | 6 | 52 | 36 | 11 |
| Julius | 0 | 20 | 8 | 26 | 5 | 34 | 42 | 13 | 12 |
| Augustus | 0 | 23 | 5 | 11 | 5 | 26 | 8 | 58 | 50 |
| September | 0 | 25 | 56 | 11 | 7 | 1 | 58 | 29 | 51 |
| October | 0 | 28 | 52 | 58 | 7 | 13 | 24 | 11 | 29 |
| November | 0 | 31 | 43 | 54 | 8 | 19 | 44 | 46 | 30 |
| December | 0 | 34 | 40 | 7 | | | | | |

# Residuum tabule augium in mensibus in anno communi

Tabula augium in diebus

| Dies | 2 | 3 | 4 |
|---|---|---|---|
| 1 | 0 | 5 | 42 |
| 2 | 0 | 11 | 24 |
| 3 | 0 | 17 | 6 |
| 4 | 0 | 22 | 48 |
| 5 | 0 | 28 | 30 |
| 6 | 0 | 34 | 12 |
| 7 | 0 | 39 | 54 |
| 8 | 0 | 45 | 36 |
| 9 | 0 | 51 | 18 |
| 10 | 0 | 57 | 0 |
| 11 | 1 | 2 | 42 |
| 12 | 1 | 8 | 24 |
| 13 | 1 | 14 | 6 |
| 14 | 1 | 19 | 48 |
| 15 | 1 | 25 | 30 |
| 16 | 1 | 31 | 12 |
| 17 | 1 | 36 | 54 |
| 18 | 1 | 42 | 36 |
| 19 | 1 | 48 | 18 |
| 20 | 1 | 54 | 0 |
| 21 | 1 | 59 | 42 |
| 22 | 2 | 5 | 24 |
| 23 | 2 | 11 | 6 |
| 24 | 2 | 16 | 48 |
| 25 | 2 | 22 | 30 |
| 26 | 2 | 28 | 12 |
| 27 | 2 | 33 | 54 |
| 28 | 2 | 39 | 36 |
| 29 | 2 | 45 | 18 |
| 30 | 2 | 51 | 0 |
| 31 | 2 | 56 | 42 |

Tabula centri lune in anno bisextili / Tabula augium in mensibus hora

| | S | G | m | 2 | 3 | m | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|
| Januarius | 1 | 5 | 49 | 35 | 1 | 0 | 2 | 54 | 31 |
| Februarius | 0 | 22 | 53 | 23 | 17 | 0 | 5 | 32 | 10 |
| Marcius | 1 | 28 | 42 | 56 | 16 | 0 | 8 | 26 | 42 |
| Aprilis | 2 | 10 | 9 | 39 | 54 | 0 | 11 | 17 | 36 |
| Maius | 3 | 15 | 59 | 14 | 55 | 0 | 14 | 10 | 7 |
| Junius | 3 | 27 | 24 | 56 | 33 | 0 | 16 | 59 | 1 |
| Julius | 6 | 0 | 5 | 6 | 35 | 0 | 19 | 53 | 33 |
| Augustus | 6 | 20 | 31 | 45 | 12 | 0 | 22 | 48 | 5 |
| September | 7 | 26 | 21 | 23 | 17 | 0 | 25 | 36 | 49 |
| October | 8 | 7 | 48 | 8 | 51 | 0 | 28 | 31 | 32 |
| November | 9 | 13 | 37 | 39 | 53 | 0 | 31 | 20 | 25 |
| December | [illegible] | 3 | 51 | 31 | 34 | 0 | 34 | 14 | 57 |

| Elongatio augium planetarum a Sole | S | G | m | 2 |
|---|---|---|---|---|
| Saturni | 5 | 11 | 48 | 19 |
| Jovis | 5 | 55 | 11 | 37 |
| Martis | 1 | 13 | 26 | 50 |
| Mercurii | 3 | 29 | 14 | 10 |

De elongatione [illegible] augium [illegible] ad augem Solis [illegible]

Tabula nova augium in diebus / Tabula centri lune in diebus

| Dies | 2 | 3 | 4 | S | G | m | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 5 | 37 | 0 | 24 | 22 | 53 | 24 | 16 |
| 2 | 0 | 11 | 14 | 1 | 18 | 45 | 46 | 48 | 31 |
| 3 | 0 | 16 | 51 | 2 | 13 | 8 | 40 | 9 | 47 |
| 4 | 0 | 22 | 28 | 3 | 7 | 31 | 33 | 33 | 3 |
| 5 | 0 | 28 | 5 | 4 | 1 | 54 | 26 | 56 | 19 |
| 6 | 0 | 33 | 42 | 4 | 26 | 17 | 20 | 19 | 34 |
| 7 | 0 | 39 | 19 | 5 | 20 | 40 | 13 | 42 | 50 |
| 8 | 0 | 44 | 56 | 6 | 15 | 3 | 7 | 6 | 6 |
| 9 | 0 | 50 | 33 | 7 | 9 | 26 | 0 | 29 | 22 |
| 10 | 0 | 56 | 10 | 8 | 3 | 48 | 53 | 52 | 38 |
| 11 | 1 | 1 | 47 | 8 | 28 | 11 | 47 | 15 | 53 |
| 12 | 1 | 7 | 24 | 9 | 22 | 34 | 40 | 39 | 9 |
| 13 | 1 | 13 | 1 | 10 | 16 | 57 | 34 | 2 | 24 |
| 14 | 1 | 18 | 38 | 11 | 11 | 20 | 27 | 25 | 40 |
| 15 | 1 | 24 | 15 | 0 | 5 | 43 | 20 | 48 | 56 |
| 16 | 1 | 29 | 52 | 1 | 0 | 6 | 14 | 12 | 12 |
| 17 | 1 | 35 | 29 | 1 | 24 | 29 | 7 | 35 | 27 |
| 18 | 1 | 41 | 6 | 2 | 18 | 52 | 0 | 58 | 43 |
| 19 | 1 | 46 | 43 | 3 | 13 | 14 | 54 | 21 | 59 |
| 20 | 1 | 52 | 20 | 4 | 7 | 37 | 47 | 45 | 15 |
| 21 | 1 | 57 | 57 | 5 | 2 | 0 | 41 | 8 | 30 |
| 22 | 2 | 3 | 34 | 5 | 26 | 23 | 34 | 31 | 46 |
| 23 | 2 | 9 | 11 | 6 | 20 | 46 | 27 | 55 | 2 |
| 24 | 2 | 14 | 48 | 7 | 15 | 9 | 21 | 18 | 17 |
| 25 | 2 | 20 | 25 | 8 | 9 | 32 | 14 | 41 | 33 |
| 26 | 2 | 26 | 2 | 9 | 3 | 55 | 8 | 4 | 49 |
| 27 | 2 | 31 | 39 | 9 | 28 | 18 | 1 | 28 | 5 |
| 28 | 2 | 37 | 38 | 10 | 22 | 40 | 54 | 51 | 20 |
| 29 | 2 | 43 | 16 | 11 | 17 | 3 | 48 | 14 | 36 |
| 30 | 2 | 48 | 54 | 0 | 11 | 26 | 41 | 37 | 52 |
| 31 | 2 | 54 | 31 | 1 | 5 | 49 | 35 | 1 | 8 |

# Tabula equationis accessus et recessus argumenti capitis arietis sive octave sphere

| Gradus signi | 0 Equatio G | m | 2 | Differentia m | 2 | 1 Equatio G | m | 2 | Differentia m | 2 | 2 Equatio G | m | 2 | Differentia m | 2 | Gradus signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 9 | 29 | 9 | 29 | 4 | 37 | 17 | 8 | [illegible] | 7 | 52 | [illegible] | [illegible] | [illegible] | 29 |
| 2 | 0 | 18 | 49 | 9 | 24 | 4 | 45 | 18 | 8 | [illegible] | 7 | 57 | 19 | [illegible] | [illegible] | 28 |
| 3 | 0 | 28 | 11 | 9 | 22 | 4 | 53 | 14 | [illegible] | [illegible] | 8 | 0 | 41 | [illegible] | [illegible] | 27 |
| 4 | 0 | 37 | 32 | 9 | 21 | 5 | 1 | 5 | [illegible] | [illegible] | 8 | 4 | 56 | [illegible] | [illegible] | 26 |
| 5 | 0 | 46 | 52 | 9 | 20 | 5 | 8 | 51 | [illegible] | [illegible] | 8 | 9 | 2 | [illegible] | [illegible] | 25 |
| 6 | 0 | 56 | 12 | 9 | 20 | 5 | 16 | 30 | [illegible] | [illegible] | 8 | 12 | 58 | [illegible] | [illegible] | 24 |
| 7 | 1 | 5 | 32 | 9 | 20 | 5 | 24 | 4 | [illegible] | [illegible] | 8 | 16 | 54 | [illegible] | [illegible] | 23 |
| 8 | 1 | 14 | 28 | 9 | 16 | 5 | 31 | 33 | [illegible] | [illegible] | 8 | 20 | 55 | [illegible] | [illegible] | 22 |
| 9 | 1 | 24 | 4 | 9 | 16 | 5 | 38 | 57 | [illegible] | [illegible] | 8 | 23 | 42 | [illegible] | [illegible] | 21 |
| 10 | 1 | 33 | 20 | 9 | 16 | 5 | 46 | 16 | [illegible] | [illegible] | 8 | 27 | 12 | [illegible] | [illegible] | 20 |
| 11 | 1 | 42 | 34 | 9 | 14 | 5 | 53 | 29 | [illegible] | [illegible] | 8 | 30 | 23 | [illegible] | [illegible] | 19 |
| 12 | 1 | 51 | 46 | 9 | 12 | 6 | 0 | 29 | [illegible] | [illegible] | 8 | 33 | 24 | [illegible] | [illegible] | 18 |
| 13 | 2 | 0 | 57 | 9 | 11 | 6 | 7 | 26 | [illegible] | [illegible] | 8 | 36 | 17 | [illegible] | [illegible] | 17 |
| 14 | 2 | 10 | 6 | 9 | 9 | 6 | 14 | 17 | [illegible] | [illegible] | 8 | 38 | 56 | [illegible] | [illegible] | 16 |
| 15 | 2 | 19 | 13 | 9 | 7 | 6 | 21 | 2 | [illegible] | [illegible] | 8 | 41 | 28 | [illegible] | [illegible] | 15 |
| 16 | 2 | 28 | 17 | 9 | 4 | 6 | 27 | 40 | 6 | [illegible] | 8 | 43 | 56 | [illegible] | [illegible] | 14 |
| 17 | 2 | 37 | 16 | 8 | 59 | 6 | 34 | 10 | 6 | [illegible] | 8 | 46 | 2 | [illegible] | [illegible] | 13 |
| 18 | 2 | 46 | 11 | 8 | 55 | 6 | 40 | 33 | 6 | [illegible] | 8 | 48 | 5 | [illegible] | [illegible] | 12 |
| 19 | 2 | 55 | 2 | 8 | 51 | 6 | 46 | 49 | 6 | [illegible] | 8 | 49 | 49 | [illegible] | [illegible] | 11 |
| 20 | 3 | 3 | 49 | 8 | 47 | 6 | 52 | 58 | 6 | [illegible] | 8 | 51 | 44 | [illegible] | [illegible] | 10 |
| 21 | 3 | 12 | 47 | 8 | [illegible] | 6 | 59 | 0 | [illegible] | [illegible] | 8 | 53 | 59 | [illegible] | [illegible] | 9 |
| 22 | 3 | 21 | 36 | 8 | 49 | 7 | 4 | 53 | [illegible] | [illegible] | 8 | 54 | 41 | [illegible] | [illegible] | 8 |
| 23 | 3 | 30 | 20 | 8 | 44 | 7 | 10 | 38 | [illegible] | [illegible] | 8 | 55 | 55 | [illegible] | [illegible] | 7 |
| 24 | 3 | 38 | 57 | 8 | 37 | 7 | 16 | 14 | [illegible] | [illegible] | 8 | 57 | 0 | [illegible] | [illegible] | 6 |
| 25 | 3 | 47 | 27 | 8 | 30 | 7 | 21 | 44 | [illegible] | [illegible] | 8 | 57 | 44 | [illegible] | [illegible] | 5 |
| 26 | 3 | 55 | 54 | 8 | 27 | 7 | 27 | 7 | [illegible] | [illegible] | 8 | 58 | 40 | [illegible] | [illegible] | 4 |
| 27 | 4 | 4 | 17 | 8 | 23 | 7 | 32 | 21 | [illegible] | [illegible] | 8 | 59 | 41 | [illegible] | [illegible] | 3 |
| 28 | 4 | 12 | 38 | 8 | 21 | 7 | 37 | 27 | [illegible] | [illegible] | 8 | 59 | 44 | [illegible] | [illegible] | 2 |
| 29 | 4 | 20 | 54 | 8 | 17 | 7 | 42 | 33 | [illegible] | [illegible] | 8 | 59 | 47 | [illegible] | [illegible] | 1 |
| 30 | 4 | 29 | 10 | 8 | 15 | 7 | 47 | 10 | [illegible] | [illegible] | 9 | 0 | 0 | [illegible] | [illegible] | 0 |
| | 11 | | | 5 | | 10 | | | 4 | | 9 | | | 3 | | |

# Tabula equacionum Solis prima

| | Equatio solis minute ☉ | | | Dra eq nomis A | | | Equatio solis minute 1 | | Dra eq nomis A | | Equatio solis subtrahe 2 | | | Dra eq nomis A | | Gradus signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | M | 2 | m | 2 | S | m | 2 | m | 2 | S | m | 2 | m | 2 | |
| 1 | 0 | 2 | 10 | 2 | 10 | 1 | 4 | 46 | 1 | 52 | 1 | 51 | 51 | 1 | 7 | 29 |
| 2 | 0 | 4 | 19 | 2 | 9 | 1 | 6 | 37 | 1 | 51 | 1 | 53 | 56 | 1 | 5 | 28 |
| 3 | 0 | 6 | 27 | 2 | 8 | 1 | 8 | 28 | 1 | 51 | 1 | 54 | 0 | 1 | 4 | 27 |
| 4 | 0 | 8 | 36 | 2 | 9 | 1 | 10 | 19 | 1 | 51 | 1 | 55 | 6 | 1 | 0 | 26 |
| 5 | 0 | 10 | 44 | 2 | 8 | 1 | 12 | 9 | 1 | 50 | 1 | 56 | 9 | 1 | 3 | 25 |
| 6 | 0 | 12 | 53 | 2 | 9 | 1 | 13 | 56 | 1 | 47 | 1 | 57 | 11 | 1 | 2 | 24 |
| 7 | 0 | 15 | 2 | 2 | 9 | 1 | 15 | 41 | 1 | 45 | 1 | 58 | 2 | 0 | 51 | 23 |
| 8 | 0 | 17 | 10 | 2 | 8 | 1 | 17 | 24 | 1 | 43 | 1 | 58 | 52 | 0 | 50 | 22 |
| 9 | 0 | 19 | 19 | 2 | 9 | 1 | 19 | 6 | 1 | 42 | 1 | 59 | 41 | 0 | 49 | 21 |
| 10 | 0 | 21 | 28 | 2 | 9 | 1 | 20 | 48 | 1 | 42 | 2 | 0 | 29 | 0 | 48 | 20 |
| 11 | 0 | 23 | 36 | 2 | 8 | 1 | 22 | 29 | 1 | 41 | 2 | 1 | 16 | 0 | 47 | 19 |
| 12 | 0 | 25 | 45 | 2 | 9 | 1 | 24 | 10 | 1 | 40 | 2 | 2 | 2 | 0 | 46 | 18 |
| 13 | 0 | 27 | 53 | 2 | 8 | 1 | 25 | 50 | 1 | 40 | 2 | 2 | 42 | 0 | 40 | 17 |
| 14 | 0 | 30 | 1 | 2 | 8 | 1 | 27 | 29 | 1 | 39 | 2 | 3 | 21 | 0 | 39 | 16 |
| 15 | 0 | 32 | 8 | 2 | 7 | 1 | 29 | 8 | 1 | 39 | 2 | 3 | 59 | 0 | 38 | 15 |
| 16 | 0 | 34 | 16 | 2 | 8 | 1 | 30 | 46 | 1 | 38 | 2 | 4 | 36 | 0 | [illegible] | 14 |
| 17 | 0 | 36 | 23 | 2 | 7 | 1 | 32 | 23 | 1 | 37 | 2 | 5 | 6 | 0 | 40 | 13 |
| 18 | 0 | 38 | 30 | 2 | 7 | 1 | 33 | 59 | 1 | 36 | 2 | 5 | 48 | 0 | 32 | 12 |
| 19 | 0 | 40 | 37 | 2 | 6 | 1 | 35 | 30 | 1 | 35 | 2 | 6 | 17 | 0 | 29 | 11 |
| 20 | 0 | 42 | 43 | 2 | 6 | 1 | 37 | 0 | 1 | 36 | 2 | 6 | 45 | 0 | 28 | 10 |
| 21 | 0 | 44 | 49 | 2 | 6 | 1 | 38 | 30 | 1 | 36 | 2 | 7 | 12 | 0 | 27 | 9 |
| 22 | 0 | 46 | 55 | 2 | 4 | 1 | 39 | 58 | 1 | 28 | 2 | 7 | 37 | 0 | 25 | 8 |
| 23 | 0 | 48 | 59 | 2 | 5 | 1 | 41 | 27 | 1 | 29 | 2 | 8 | 2 | 0 | 25 | 7 |
| 24 | 0 | 51 | 4 | 2 | 0 | 1 | 42 | 55 | 1 | 27 | 2 | 8 | 27 | 0 | 24 | 6 |
| 25 | 0 | 53 | 4 | 1 | 58 | 1 | 44 | 18 | 1 | 20 | 2 | 8 | 45 | 0 | 18 | 5 |
| 26 | 0 | 55 | 2 | 1 | 59 | 1 | 45 | 35 | 1 | 20 | 2 | 9 | 1 | 0 | 16 | 4 |
| 27 | 0 | 57 | 1 | 1 | 58 | 1 | 46 | 53 | 1 | 19 | 2 | 9 | 17 | 0 | 16 | 3 |
| 28 | 0 | 58 | 59 | 1 | 58 | 1 | 48 | 10 | 1 | 17 | 2 | 9 | 32 | 0 | 14 | 2 |
| 29 | 1 | 0 | 57 | 1 | 57 | 1 | 49 | 28 | 1 | 18 | 2 | 9 | 45 | 0 | 13 | 1 |
| 30 | 1 | 2 | 54 | 1 | 52 | 1 | 50 | 44 | 1 | 16 | 2 | 9 | 57 | 0 | 12 | 0 |
| | Adde | | 11 | M | | Adde | | 10 | M | | Adde | | 9 | S | 2 | |

# Solis Secunda

| | Minute 3 | | | S | | Minute 4 | | | S | | Minute 5 | | | S | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 9 | 59 | 0 | 1 | 1 | 53 | 46 | 1 | 11 | 1 | 5 | 1 | 2 | 7 | 29 |
| 2 | 2 | 10 | 0 | 0 | 0 | 1 | 52 | 34 | 1 | 11 | 1 | 2 | 54 | 2 | 7 | 28 |
| 3 | 2 | 10 | 0 | 0 | 0 | 1 | 51 | 24 | 1 | 12 | 1 | 0 | 47 | 2 | 7 | 27 |
| 4 | 2 | 10 | 0 | 0 | 3 | 1 | 50 | 12 | 1 | 11 | 0 | 58 | 40 | 2 | 7 | 26 |
| 5 | 2 | 9 | 57 | 0 | 6 | 1 | 48 | 59 | 1 | 13 | 0 | 56 | 33 | 2 | 7 | 25 |
| 6 | 2 | 9 | 51 | 0 | 11 | 1 | 47 | 46 | 1 | 20 | 0 | 54 | 27 | 2 | 8 | 24 |
| 7 | 2 | 9 | 36 | 0 | 15 | 1 | 46 | 20 | 1 | 24 | 0 | 52 | 17 | 2 | 8 | 23 |
| 8 | 2 | 9 | 20 | 0 | 18 | 1 | 44 | 53 | 1 | 27 | 0 | 50 | 9 | 2 | 8 | 22 |
| 9 | 2 | 9 | 2 | 0 | 17 | 1 | 43 | 26 | 1 | 29 | 0 | 48 | 1 | 2 | 8 | 21 |
| 10 | 2 | 8 | 45 | 0 | 20 | 1 | 41 | 57 | 1 | 30 | 0 | 45 | 53 | 2 | 8 | 20 |
| 11 | 2 | 8 | 25 | 0 | 23 | 1 | 40 | 27 | 1 | 30 | 0 | 43 | 44 | 2 | 8 | 19 |
| 12 | 2 | 8 | 6 | 0 | 24 | 1 | 38 | 57 | 1 | 32 | 0 | 41 | 35 | 2 | 9 | 18 |
| 13 | 2 | 7 | 41 | 0 | 27 | 1 | 37 | 25 | 1 | 32 | 0 | 39 | 25 | 2 | 9 | 17 |
| 14 | 2 | 7 | 14 | 0 | 25 | 1 | 35 | 53 | 1 | 33 | 0 | 37 | 16 | 2 | 10 | 16 |
| 15 | 2 | 6 | 46 | 0 | 28 | 1 | 34 | 20 | 1 | 34 | 0 | 35 | 6 | 2 | 9 | 15 |
| 16 | 2 | 6 | 18 | 0 | 30 | 1 | 32 | 46 | 1 | 34 | 0 | 32 | 50 | 2 | 10 | 14 |
| 17 | 2 | 5 | 48 | 0 | 30 | 1 | 31 | 12 | 1 | 39 | 0 | 30 | 35 | 2 | 14 | 13 |
| 18 | 2 | 5 | 18 | 0 | 36 | 1 | 29 | 33 | 1 | 43 | 0 | 28 | 19 | 2 | 16 | 12 |
| 19 | 2 | 4 | 42 | 0 | 37 | 1 | 27 | 50 | 1 | 47 | 0 | 26 | 1 | 2 | 16 | 11 |
| 20 | 2 | 4 | 5 | 0 | 38 | 1 | 26 | 3 | 1 | 47 | 0 | 23 | 42 | 2 | 18 | 10 |
| 21 | 2 | 3 | 27 | 0 | 40 | 1 | 24 | 16 | 1 | 48 | 0 | 21 | 22 | 2 | 19 | 9 |
| 22 | 2 | 2 | 37 | 0 | 42 | 1 | 22 | 28 | 1 | 43 | 0 | 19 | 1 | 2 | 20 | 8 |
| 23 | 2 | 1 | 45 | 0 | 46 | 1 | 20 | 40 | 1 | 49 | 0 | 16 | 40 | 2 | 21 | 7 |
| 24 | 2 | 0 | 51 | 0 | 48 | 1 | 18 | 51 | 1 | 41 | 0 | 14 | 19 | 2 | 21 | 6 |
| 25 | 1 | 59 | 53 | 0 | 43 | 1 | 17 | 0 | 1 | 42 | 0 | 11 | 58 | 2 | 21 | 5 |
| 26 | 1 | 58 | 55 | 0 | 48 | 1 | 15 | 8 | 1 | 42 | 0 | 9 | 36 | 2 | 21 | 4 |
| 27 | 1 | 57 | 57 | 1 | 0 | 1 | 13 | 16 | 2 | 3 | 0 | 7 | 12 | 2 | 22 | 3 |
| 28 | 1 | 56 | 57 | 1 | 0 | 1 | 11 | 13 | 2 | 3 | 0 | 4 | 48 | 2 | 22 | 2 |
| 29 | 1 | 55 | 57 | 1 | 0 | 1 | 9 | 10 | 2 | 3 | 0 | 2 | 29 | 2 | 24 | 1 |
| 30 | 1 | 54 | 57 | 1 | 11 | 1 | 7 | 7 | 2 | 6 | 0 | 0 | 0 | 2 | 24 | 0 |
| | Adde | | 8 | S A | | Adde | | 7 | | Adde | Adde | | 6 | A | | |

# Tabula equationum lune prima

| Gra signi | Equatio centri A | | Dra A | Proportionalia | Dra A | Diversitas dyametri | | Dra A | Equatio argumenti | | | Dra argumenti A | | Gra |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | m | m | m | m | S | m | m | S | m | 2 | m | 40 | |
| 1 | 0 | 9 | 9 | 0 | 0 | 0 | 3 | 2 | 0 | 4 | 46 | 4 | 45 | 29 |
| 2 | 0 | 18 | 9 | 0 | 0 | 0 | 5 | 2 | 0 | 9 | 31 | 4 | 44 | 28 |
| 3 | 0 | 27 | 9 | 0 | 0 | 0 | 7 | 3 | 0 | 14 | 15 | 4 | 45 | 27 |
| 4 | 0 | 36 | 9 | 0 | 0 | 0 | 10 | 2 | 0 | 19 | 0 | 4 | 44 | 26 |
| 5 | 0 | 45 | 8 | 0 | 0 | 0 | 12 | 2 | 0 | 23 | 44 | 4 | 44 | 25 |
| 6 | 0 | 53 | 9 | 0 | 0 | 0 | 14 | 3 | 0 | 28 | 28 | 4 | 43 | 24 |
| 7 | 1 | 2 | 9 | 0 | 0 | 0 | 17 | 2 | 0 | 33 | 11 | 4 | 43 | 23 |
| 8 | 1 | 11 | 9 | 0 | 0 | 0 | 19 | 2 | 0 | 37 | 53 | 4 | 43 | 22 |
| 9 | 1 | 20 | 9 | 0 | 0 | 0 | 21 | 3 | 0 | 42 | 37 | 4 | 42 | 21 |
| 10 | 1 | 29 | 9 | 0 | 0 | 0 | 24 | 2 | 0 | 47 | 19 | 4 | 41 | 20 |
| 11 | 1 | 38 | 9 | 0 | 0 | 0 | 26 | 2 | 0 | 52 | 0 | 4 | 41 | 19 |
| 12 | 1 | 46 | 8 | 1 | 0 | 0 | 28 | 3 | 0 | 56 | 41 | 4 | 39 | 18 |
| 13 | 1 | 55 | 9 | 1 | 0 | 0 | 31 | 2 | 1 | 1 | 20 | 4 | 39 | 17 |
| 14 | 2 | 4 | 9 | 1 | 0 | 0 | 33 | 2 | 1 | 5 | 59 | 4 | 38 | 16 |
| 15 | 2 | 13 | 9 | 1 | 0 | 0 | 35 | 3 | 1 | 10 | 37 | 4 | 38 | 15 |
| 16 | 2 | 22 | 9 | 1 | 0 | 0 | 38 | 2 | 1 | 15 | 15 | 4 | 36 | 14 |
| 17 | 2 | 31 | 8 | 1 | 0 | 0 | 40 | 2 | 1 | 19 | 51 | 4 | 36 | 13 |
| 18 | 2 | 39 | 9 | 1 | 0 | 0 | 42 | 3 | 1 | 24 | 27 | 4 | 33 | 12 |
| 19 | 2 | 48 | 9 | 1 | 0 | 0 | 45 | 2 | 1 | 29 | 0 | 4 | 32 | 11 |
| 20 | 2 | 57 | 8 | 2 | 0 | 0 | 47 | 2 | 1 | 33 | 32 | 4 | 31 | 10 |
| 21 | 3 | 5 | 9 | 2 | 0 | 0 | 49 | 3 | 1 | 38 | 3 | 4 | 30 | 9 |
| 22 | 3 | 14 | 9 | 2 | 0 | 0 | 52 | 2 | 1 | 42 | 33 | 4 | 28 | 8 |
| 23 | 3 | 23 | 9 | 2 | 0 | 0 | 54 | 2 | 1 | 47 | 1 | 4 | 26 | 7 |
| 24 | 3 | 31 | 8 | 2 | 0 | 0 | 57 | 3 | 1 | 51 | 27 | 4 | 24 | 6 |
| 25 | 3 | 40 | 9 | 2 | 0 | 0 | 59 | 2 | 1 | 55 | 52 | 4 | 23 | 5 |
| 26 | 3 | 49 | 9 | 2 | 0 | 1 | 1 | 2 | 2 | 0 | 15 | 4 | 22 | 4 |
| 27 | 3 | 57 | 8 | 3 | 0 | 1 | 3 | 3 | 2 | 4 | 37 | 4 | 20 | 3 |
| 28 | 4 | 6 | 9 | 3 | 0 | 1 | 6 | 2 | 2 | 8 | 57 | 4 | 17 | 2 |
| 29 | 4 | 15 | 9 | 3 | 0 | 1 | 8 | 2 | 2 | 13 | 14 | 4 | 15 | 1 |
| 30 | 4 | 23 | 8 | 3 | 0 | 1 | 10 | 2 | 2 | 17 | 29 | 4 | 14 | 0 |
| | Subtrahe | | 9 | | 0 | | .11. | 2 | | A | | | | |

# Tabula equationum lune secunda:–

| | Adde | | A | | A | .1. | | dra A | | | | A | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 | 32 | 9 | 3 | 0 | 1 | 12 | 2 | 2 | 21 | 47 | 4 | 14 | 29 |
| 2 | 4 | 41 | 9 | 3 | 1 | 1 | 14 | 2 | 2 | 25 | 55 | 4 | 10 | 28 |
| 3 | 4 | 50 | 8 | 4 | 0 | 1 | 16 | 3 | 2 | 30 | 5 | 4 | 9 | 27 |
| 4 | 4 | 58 | 9 | 4 | 0 | 1 | 19 | 2 | 2 | 34 | 12 | 4 | 5 | 26 |
| 5 | 5 | 7 | 9 | 4 | 0 | 1 | 21 | 2 | 2 | 38 | 17 | 4 | 4 | 25 |
| 6 | 5 | 15 | 8 | 4 | 1 | 1 | 23 | 2 | 2 | 42 | 21 | 4 | 1 | 24 |
| 7 | 5 | 24 | 9 | 5 | 0 | 1 | 25 | 2 | 2 | 46 | 22 | 3 | 57 | 23 |
| 8 | 5 | 33 | 9 | 5 | 0 | 1 | 27 | 2 | 2 | 50 | 19 | 3 | 55 | 22 |
| 9 | 5 | 41 | 9 | 5 | 0 | 1 | 29 | 2 | 2 | 54 | 14 | 3 | 53 | 21 |
| 10 | 5 | 50 | 9 | 5 | 1 | 1 | 31 | 2 | 2 | 58 | 7 | 3 | 51 | 20 |
| 11 | 5 | 59 | 8 | 6 | 0 | 1 | 33 | 2 | 3 | 1 | 58 | 3 | 49 | 19 |
| 12 | 6 | 7 | 9 | 6 | 0 | 1 | 35 | 2 | 3 | 5 | 46 | 3 | 45 | 18 |
| 13 | 6 | 16 | 9 | 6 | 1 | 1 | 37 | 2 | 3 | 9 | 31 | 3 | 42 | 17 |
| 14 | 6 | 25 | 8 | 7 | 0 | 1 | 39 | 1 | 3 | 13 | 13 | 3 | 37 | 16 |
| 15 | 6 | 33 | 9 | 7 | 0 | 1 | 40 | 2 | 3 | 16 | 51 | 3 | 34 | 15 |
| 16 | 6 | 42 | 8 | 7 | 1 | 1 | 42 | 2 | 3 | 20 | 26 | 3 | 33 | 14 |
| 17 | 6 | 50 | 8 | 8 | 0 | 1 | 44 | 1 | 3 | 23 | 59 | 3 | 31 | 13 |
| 18 | 6 | 58 | 9 | 8 | 0 | 1 | 45 | 2 | 3 | 27 | 30 | 3 | 27 | 12 |
| 19 | 7 | 7 | 8 | 8 | 1 | 1 | 47 | 1 | 3 | 30 | 57 | 3 | 23 | 11 |
| 20 | 7 | 15 | 8 | 9 | 0 | 1 | 48 | 1 | 3 | 34 | 20 | 3 | 20 | 10 |
| 21 | 7 | 23 | 9 | 9 | 0 | 1 | 49 | 2 | 3 | 37 | 40 | 3 | 17 | 9 |
| 22 | 7 | 32 | 8 | 9 | 1 | 1 | 51 | 2 | 3 | 40 | 57 | 3 | 13 | 8 |
| 23 | 7 | 40 | 8 | 10 | 0 | 1 | 53 | 1 | 3 | 44 | 10 | 3 | 10 | 7 |
| 24 | 7 | 48 | 8 | 10 | 0 | 1 | 54 | 2 | 3 | 47 | 20 | 3 | 6 | 6 |
| 25 | 7 | 56 | 8 | 10 | 1 | 1 | 56 | 2 | 3 | 50 | 26 | 3 | 3 | 5 |
| 26 | 8 | 4 | 8 | 11 | 0 | 1 | 58 | 1 | 3 | 53 | 29 | 3 | 1 | 4 |
| 27 | 8 | 12 | 8 | 11 | 0 | 1 | 59 | 2 | 3 | 56 | 30 | 2 | 56 | 3 |
| 28 | 8 | 20 | 8 | 11 | 1 | 2 | 1 | 1 | 3 | 59 | 26 | 2 | 51 | 2 |
| 29 | 8 | 28 | 8 | 12 | 0 | 2 | 2 | 1 | 4 | 2 | 17 | 2 | 41 | 1 |
| 30 | 8 | 36 | 8 | 12 | 1 | 2 | 3 | 2 | 4 | 5 | 4 | 2 | 43 | 0 |
| | Subtrahe | | | | | | .10. | | Adde | | | | | |

# Tabula equationum lune tercia

| Gra signi | Equatio centri A G | M | Dra A M | Minuta proportionalia M | Dra A M | Diversitas dyametri G | M | Dra A M | Equatio argumenti G | M | S | Dra argumenti A M | S | Gra sig |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8 | 44 | 8 | 13 | 0 | 2 | 5 | 1 | 4 | 7 | 47 | 2 | 40 | 29 |
| 2 | 8 | 52 | 8 | 13 | 1 | 2 | 6 | 1 | 4 | 10 | 27 | 2 | 36 | 28 |
| 3 | 8 | 59 | 7 | 14 | 1 | 2 | 7 | 1 | 4 | 13 | 3 | 2 | 32 | 27 |
| 4 | 9 | 7 | 8 | 14 | 0 | 2 | 9 | 2 | 4 | 15 | 35 | 2 | 28 | 26 |
| 5 | 9 | 15 | 8 | 15 | 1 | 2 | 10 | 1 | 4 | 18 | 3 | 2 | 24 | 25 |
| 6 | 9 | 22 | 7 | 15 | 0 | 2 | 12 | 2 | 4 | 20 | 27 | 2 | 20 | 24 |
| 7 | 9 | 30 | 8 | 15 | 0 | 2 | 13 | 1 | 4 | 22 | 47 | 2 | 14 | 23 |
| 8 | 9 | 37 | 7 | 16 | 1 | 2 | 14 | 1 | 4 | 25 | 2 | 2 | 10 | 22 |
| 9 | 9 | 44 | 7 | 16 | 0 | 2 | 15 | 1 | 4 | 27 | 12 | 2 | 6 | 21 |
| 10 | 9 | 52 | 8 | 17 | 1 | 2 | 16 | 1 | 4 | 29 | 18 | 2 | 2 | 20 |
| 11 | 9 | 59 | 7 | 17 | 0 | 2 | 17 | 1 | 4 | 31 | 20 | 1 | 58 | 19 |
| 12 | 10 | 6 | 7 | 18 | 1 | 2 | 18 | 1 | 4 | 33 | 18 | 1 | 53 | 18 |
| 13 | 10 | 13 | 7 | 18 | 0 | 2 | 19 | 1 | 4 | 35 | 11 | 1 | 48 | 17 |
| 14 | 10 | 20 | 7 | 19 | 1 | 2 | 20 | 1 | 4 | 36 | 59 | 1 | 44 | 16 |
| 15 | 10 | 27 | 7 | 19 | 0 | 2 | 21 | 1 | 4 | 38 | 43 | 1 | 40 | 15 |
| 16 | 10 | 34 | 7 | 20 | 1 | 2 | 22 | 1 | 4 | 40 | 23 | 1 | 34 | 14 |
| 17 | 10 | 41 | 7 | 20 | 0 | 2 | 23 | 1 | 4 | 41 | 58 | 1 | 30 | 13 |
| 18 | 10 | 48 | 7 | 21 | 1 | 2 | 24 | 1 | 4 | 43 | 28 | 1 | 24 | 12 |
| 19 | 10 | 55 | 7 | 21 | 0 | 2 | 25 | 1 | 4 | 44 | 53 | 1 | 20 | 11 |
| 20 | 11 | 2 | 6 | 22 | 1 | 2 | 26 | 1 | 4 | 46 | 13 | 1 | 13 | 10 |
| 21 | 11 | 8 | 7 | 22 | 0 | 2 | 27 | 1 | 4 | 47 | 26 | 1 | 9 | 9 |
| 22 | 11 | 15 | 6 | 23 | 1 | 2 | 28 | 1 | 4 | 48 | 35 | 1 | 3 | 8 |
| 23 | 11 | 21 | 6 | 23 | 0 | 2 | 29 | 1 | 4 | 49 | 38 | 1 | 3 | 7 |
| 24 | 11 | 27 | 6 | 23 | 0 | 2 | 30 | 1 | 4 | 50 | 41 | 0 | 44 | 6 |
| 25 | 11 | 33 | 6 | 24 | 1 | 2 | 31 | 1 | 4 | 51 | 38 | 0 | 40 | 5 |
| 26 | 11 | 39 | 5 | 24 | 0 | 2 | 32 | 1 | 4 | 52 | 28 | 0 | 33 | 4 |
| 27 | 11 | 44 | 6 | 25 | 1 | 2 | 33 | 1 | 4 | 53 | 11 | 0 | 30 | 3 |
| 28 | 11 | 50 | 5 | 25 | 0 | 2 | 34 | 1 | 4 | 53 | 50 | 0 | 34 | 2 |
| 29 | 11 | 55 | 5 | 26 | 1 | 2 | 35 | 1 | 4 | 54 | 25 | 0 | 29 | 1 |
| 30 | 12 | 0 | 5 | 26 | 0 | 2 | 36 | 1 | 4 | 54 | 54 | 0 | 24 | 0 |
| | Subtrahe | | | | | •9• | | | Adde | | | | | |

# Tabula equationum lune Quarta

| Gra signi | Equatio centri G (Adde) | M | Dra A M | Minuta proportionalia M | Dra A M | Diversitas dyametri G (•3•) | M | Dra A M | Equatio argumenti G (Subtrahe) | M | S | Dra argumenti A M | S | Gra sig |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 5 | 5 | 27 | 0 | 2 | 37 | 1 | 4 | 55 | 18 | 0 | 15 | 29 |
| 2 | 12 | 10 | 5 | 27 | 1 | 2 | 37 | 0 | 4 | 55 | 31 | 0 | 12 | 28 |
| 3 | 12 | 15 | 5 | 28 | 0 | 2 | 38 | 1 | 4 | 55 | 40 | 0 | 6 | 27 |
| 4 | 12 | 20 | 5 | 28 | 1 | 2 | 38 | 0 | 4 | 55 | 55 | 0 | 5 | 26 |
| 5 | 12 | 24 | 4 | 29 | 1 | 2 | 38 | 0 | 4 | 56 | 0 | 0 | 4 | 25 |
| 6 | 12 | 28 | 4 | 30 | 0 | 2 | 38 | 0 | 4 | 55 | 56 | 0 | 14 | 24 |
| 7 | 12 | 32 | 4 | 30 | 1 | 2 | 38 | 0 | 4 | 55 | 42 | 0 | 17 | 23 |
| 8 | 12 | 36 | 4 | 31 | 0 | 2 | 39 | 1 | 4 | 55 | 25 | 0 | 21 | 22 |
| 9 | 12 | 39 | 3 | 31 | 1 | 2 | 39 | 0 | 4 | 55 | 4 | 0 | 33 | 21 |
| 10 | 12 | 42 | 3 | 32 | 0 | 2 | 39 | 0 | 4 | 54 | 41 | 0 | 29 | 20 |
| 11 | 12 | 45 | 3 | 32 | 1 | 2 | 39 | 0 | 4 | 54 | 12 | 0 | 32 | 19 |
| 12 | 12 | 48 | 3 | 33 | 0 | 2 | 39 | 0 | 4 | 53 | 38 | 0 | 39 | 18 |
| 13 | 12 | 51 | 3 | 33 | 1 | 2 | 40 | 1 | 4 | 52 | 59 | 0 | 45 | 17 |
| 14 | 12 | 54 | 3 | 34 | 1 | 2 | 40 | 0 | 4 | 52 | 14 | 0 | 52 | 16 |
| 15 | 12 | 56 | 2 | 35 | 0 | 2 | 40 | 0 | 4 | 51 | 22 | 0 | 0 | 15 |
| 16 | 12 | 58 | 2 | 35 | 1 | 2 | 40 | 0 | 4 | 50 | 22 | 1 | 5 | 14 |
| 17 | 13 | 0 | 2 | 36 | 0 | 2 | 40 | 0 | 4 | 49 | 17 | 1 | 7 | 13 |
| 18 | 13 | 2 | 2 | 36 | 1 | 2 | 40 | 0 | 4 | 48 | 10 | 1 | 10 | 12 |
| 19 | 13 | 4 | 2 | 37 | 0 | 2 | 40 | 0 | 4 | 46 | 54 | 1 | 21 | 11 |
| 20 | 13 | 5 | 1 | 37 | 1 | 2 | 39 | 1 | 4 | 45 | 33 | 1 | 20 | 10 |
| 21 | 13 | 6 | 1 | 38 | 0 | 2 | 39 | 0 | 4 | 44 | 7 | 1 | 33 | 9 |
| 22 | 13 | 7 | 1 | 38 | 1 | 2 | 38 | 1 | 4 | 42 | 34 | 1 | 38 | 8 |
| 23 | 13 | 8 | 1 | 39 | 0 | 2 | 38 | 0 | 4 | 40 | 56 | 1 | 41 | 7 |
| 24 | 13 | 9 | 1 | 39 | 1 | 2 | 37 | 1 | 4 | 39 | 14 | 1 | 46 | 6 |
| 25 | 13 | 9 | 0 | 40 | 0 | 2 | 36 | 1 | 4 | 37 | 25 | 1 | 52 | 5 |
| 26 | 13 | 8 | 1 | 40 | 1 | 2 | 35 | 1 | 4 | 35 | 37 | 1 | 56 | 4 |
| 27 | 13 | 7 | 1 | 41 | 0 | 2 | 34 | 1 | 4 | 33 | 41 | 2 | 7 | 3 |
| 28 | 13 | 6 | 1 | 41 | 1 | 2 | 33 | 1 | 4 | 31 | 34 | 2 | 14 | 2 |
| 29 | 13 | 5 | 1 | 42 | 0 | 2 | 32 | 1 | 4 | 29 | 20 | 2 | 20 | 1 |
| 30 | 13 | 4 | 1 | 42 | 0 | 2 | 31 | 1 | 4 | 27 | 0 | 2 | 22 | 0 |
| | Subtrahe | | A | | | •8• | | A | | | | A | | |

# Tabula Equationum lune Quinta

| Gra signi | Equatio centri A (g) | (m) | Dra B (m) | proportionalia (m) | Dra A (m) | Diversitas dyametri (g) | (m) | Dra B (m) | Equatio argumenti Θ (g) | (m) | (2) | Dra argumenti B (m) | (2) | Gra signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | | | 1 | | | | 2 | 22 | |
| 1 | 13 | 3 | 2 | 43 | 1 | 2 | 30 | 1 | 4 | 24 | 38 | 2 | 27 | 29 |
| 2 | 13 | 1 | 2 | 44 | 0 | 2 | 29 | 1 | 4 | 22 | 11 | 2 | 33 | 28 |
| 3 | 12 | 59 | 3 | 44 | 1 | 2 | 28 | 2 | 4 | 19 | 38 | 2 | 40 | 27 |
| 4 | 12 | 56 | 3 | 45 | 0 | 2 | 26 | 1 | 4 | 16 | 58 | 2 | 45 | 26 |
| 5 | 12 | 53 | 3 | 45 | 0 | 2 | 25 | 2 | 4 | 14 | 13 | 2 | 50 | 25 |
| 6 | 12 | 50 | 4 | 45 | 1 | 2 | 23 | 1 | 4 | 11 | 23 | 2 | 55 | 24 |
| 7 | 12 | 46 | 5 | 46 | 0 | 2 | 22 | 1 | 4 | 8 | 28 | 2 | 57 | 23 |
| 8 | 12 | 41 | 5 | 46 | 1 | 2 | 21 | 2 | 4 | 5 | 31 | 2 | 1 | 22 |
| 9 | 12 | 36 | 6 | 47 | 0 | 2 | 19 | 1 | 4 | 2 | 30 | 3 | 10 | 21 |
| 10 | 12 | 30 | 7 | 47 | 0 | 2 | 18 | 2 | 3 | 59 | 20 | 3 | 15 | 20 |
| 11 | 12 | 23 | 7 | 47 | 1 | 2 | 16 | 1 | 3 | 56 | 5 | 3 | 18 | 19 |
| 12 | 12 | 16 | 7 | 48 | 0 | 2 | 15 | 1 | 3 | 52 | 47 | 3 | 24 | 18 |
| 13 | 12 | 9 | 7 | 48 | 1 | 2 | 14 | 2 | 3 | 49 | 23 | 3 | 31 | 17 |
| 14 | 12 | 2 | 8 | 49 | 0 | 2 | 12 | 2 | 3 | 45 | 52 | 3 | 35 | 16 |
| 15 | 11 | 54 | 8 | 49 | 1 | 2 | 10 | 1 | 3 | 42 | 17 | 3 | 40 | 15 |
| 16 | 11 | 46 | 8 | 50 | 0 | 2 | 9 | 2 | 3 | 38 | 37 | 3 | 44 | 14 |
| 17 | 11 | 38 | 9 | 50 | 1 | 2 | 7 | 2 | 3 | 34 | 53 | 3 | 50 | 13 |
| 18 | 11 | 29 | 9 | 51 | 0 | 2 | 5 | 2 | 3 | 31 | 3 | 3 | 53 | 12 |
| 19 | 11 | 20 | 9 | 51 | 1 | 2 | 3 | 2 | 3 | 27 | 10 | 3 | 58 | 11 |
| 20 | 11 | 11 | 9 | 52 | 0 | 2 | 1 | 3 | 3 | 23 | 12 | 4 | 3 | 10 |
| 21 | 11 | 2 | 9 | 52 | 1 | 1 | 58 | 2 | 3 | 19 | 9 | 4 | 7 | 9 |
| 22 | 10 | 53 | 10 | 53 | 0 | 1 | 56 | 2 | 3 | 15 | 2 | 4 | 12 | 8 |
| 23 | 10 | 43 | 10 | 53 | 0 | 1 | 54 | 3 | 3 | 10 | 50 | 4 | 15 | 7 |
| 24 | 10 | 33 | 11 | 53 | 1 | 1 | 51 | 2 | 3 | 6 | 35 | 4 | 20 | 6 |
| 25 | 10 | 22 | 11 | 54 | 0 | 1 | 49 | 3 | 3 | 2 | 15 | 4 | 24 | 5 |
| 26 | 10 | 11 | 11 | 54 | 0 | 1 | 46 | 3 | 2 | 57 | 51 | 4 | 28 | 4 |
| 27 | 10 | 0 | 12 | 54 | 1 | 1 | 43 | 2 | 2 | 53 | 23 | 4 | 32 | 3 |
| 28 | 9 | 48 | 13 | 55 | 0 | 1 | 41 | 3 | 2 | 48 | 51 | 4 | 36 | 2 |
| 29 | 9 | 35 | 13 | 55 | 0 | 1 | 38 | 3 | 2 | 44 | 15 | 4 | 40 | 1 |
| 30 | 9 | 22 | 14 | 55 | 1 | 1 | 35 | 3 | 2 | 39 | 35 | 4 | 43 | 0 |
| | Subtrahe | | A | | Θ | .A. | | A | Adde | | | | A | |

# Tabula equationum lune Sexta

| | Adde | | Θ | A | | .4. | | Dra B | Subtrahe | | | Θ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 14 | | 1 | | | | | | | 4 | 43 | |
| 1 | 9 | 8 | 15 | 56 | 0 | 1 | 32 | 3 | 2 | 34 | 52 | 4 | 40 | 29 |
| 2 | 8 | 53 | 15 | 56 | 0 | 1 | 29 | 3 | 2 | 30 | 6 | 4 | 50 | 28 |
| 3 | 8 | 38 | 16 | 56 | 0 | 1 | 26 | 2 | 2 | 25 | 16 | 4 | 51 | 27 |
| 4 | 8 | 22 | 17 | 56 | 1 | 1 | 24 | 3 | 2 | 20 | 23 | 4 | 57 | 26 |
| 5 | 8 | 5 | 17 | 57 | 0 | 1 | 21 | 3 | 2 | 15 | 26 | 5 | 0 | 25 |
| 6 | 7 | 48 | 17 | 57 | 0 | 1 | 18 | 2 | 2 | 10 | 26 | 5 | 4 | 24 |
| 7 | 7 | 30 | 17 | 57 | 0 | 1 | 16 | 3 | 2 | 5 | 22 | 5 | 7 | 23 |
| 8 | 7 | 14 | 17 | 57 | 0 | 1 | 13 | 3 | 2 | 0 | 17 | 5 | 8 | 22 |
| 9 | 6 | 56 | 17 | 57 | 1 | 1 | 10 | 2 | 1 | 55 | 9 | 5 | 11 | 21 |
| 10 | 6 | 39 | 18 | 58 | 0 | 1 | 8 | 3 | 1 | 49 | 58 | 5 | 14 | 20 |
| 11 | 6 | 21 | 18 | 58 | 0 | 1 | 5 | 3 | 1 | 44 | 44 | 5 | 15 | 19 |
| 12 | 6 | 3 | 18 | 58 | 0 | 1 | 2 | 3 | 1 | 39 | 27 | 5 | 18 | 18 |
| 13 | 5 | 45 | 18 | 58 | 0 | 0 | 59 | 3 | 1 | 34 | 9 | 5 | 20 | 17 |
| 14 | 5 | 27 | 19 | 58 | 0 | 0 | 56 | 4 | 1 | 28 | 49 | 5 | 23 | 16 |
| 15 | 5 | 8 | 19 | 58 | 1 | 0 | 52 | 3 | 1 | 23 | 26 | 5 | 25 | 15 |
| 16 | 4 | 49 | 19 | 59 | 0 | 0 | 49 | 3 | 1 | 18 | 1 | 5 | 27 | 14 |
| 17 | 4 | 30 | 19 | 59 | 0 | 0 | 46 | 4 | 1 | 12 | 34 | 5 | 28 | 13 |
| 18 | 4 | 11 | 19 | 59 | 0 | 0 | 42 | 3 | 1 | 7 | 6 | 5 | 30 | 12 |
| 19 | 3 | 52 | 20 | 59 | 0 | 0 | 39 | 3 | 1 | 1 | 36 | 5 | 31 | 11 |
| 20 | 3 | 32 | 20 | 59 | 0 | 0 | 36 | 4 | 0 | 56 | 5 | 5 | 33 | 10 |
| 21 | 3 | 12 | 20 | 59 | 0 | 0 | 32 | 3 | 0 | 50 | 32 | 5 | 34 | 9 |
| 22 | 2 | 52 | 20 | 59 | 1 | 0 | 29 | 4 | 0 | 44 | 58 | 5 | 35 | 8 |
| 23 | 2 | 32 | 21 | 60 | 0 | 0 | 25 | 4 | 0 | 39 | 23 | 5 | 37 | 7 |
| 24 | 2 | 11 | 21 | 60 | 0 | 0 | 21 | 3 | 0 | 33 | 41 | 5 | 37 | 6 |
| 25 | 1 | 50 | 21 | 60 | 0 | 0 | 18 | 3 | 0 | 28 | 10 | 5 | 37 | 5 |
| 26 | 1 | 29 | 22 | 60 | 0 | 0 | 15 | 4 | 0 | 22 | 33 | 5 | 37 | 4 |
| 27 | 1 | 7 | 22 | 60 | 0 | 0 | 11 | 3 | 0 | 16 | 56 | 5 | 38 | 3 |
| 28 | 0 | 45 | 22 | 60 | 0 | 0 | 8 | 4 | 0 | 11 | 18 | 5 | 38 | 2 |
| 29 | 0 | 23 | 23 | 60 | 0 | 0 | 4 | 4 | 0 | 5 | 40 | 5 | 40 | 1 |
| 30 | 0 | 0 | 23 | 60 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 5 | 40 | 0 |
| | Subtrahe | | A | A | Θ | .6. | | A | Adde | | | A | | |

# Tabula equationum Saturni prima

| Gra signi | Equatio centri | | Dra A | Minuta proporcionalia | Dra B | Longitudo longior | | Dra A | Equatio argumenti | | Dra A | Longitudo propior | | Dra A | Statio prima | | | Gra signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | m | m | m | m | S | m | m | S | m | m | S | m | m | S | G | M | |
| 1 | 0 | 7 | 7 | 60 | 0 | 0 | 0 | 1 | 0 | 6 | 6 | 0 | 0 | 1 | 3 | 22 | 44 | 29 |
| 2 | 0 | 14 | 6 | 60 | 0 | 0 | 1 | 0 | 0 | 12 | 6 | 0 | 1 | 0 | 3 | 22 | 44 | 28 |
| 3 | 0 | 20 | 7 | 60 | 0 | 0 | 1 | 0 | 0 | 18 | 6 | 0 | 1 | 0 | 3 | 22 | 44 | 27 |
| 4 | 0 | 27 | 6 | 60 | 0 | 0 | 1 | 1 | 0 | 24 | 6 | 0 | 1 | 1 | 3 | 22 | 45 | 26 |
| 5 | 0 | 33 | 7 | 60 | 0 | 0 | 2 | 0 | 0 | 30 | 6 | 0 | 2 | 1 | 3 | 22 | 45 | 25 |
| 6 | 0 | 40 | 6 | 60 | 0 | 0 | 2 | 0 | 0 | 36 | 6 | 0 | 2 | 0 | 3 | 22 | 45 | 24 |
| 7 | 0 | 46 | 6 | 60 | 1 | 0 | 2 | 1 | 0 | 42 | 6 | 0 | 2 | 1 | 3 | 22 | 46 | 23 |
| 8 | 0 | 52 | 6 | 59 | 0 | 0 | 3 | 0 | 0 | 48 | 6 | 0 | 3 | 0 | 3 | 22 | 46 | 22 |
| 9 | 0 | 59 | 7 | 59 | 0 | 0 | 3 | 0 | 0 | 54 | 6 | 0 | 3 | 0 | 3 | 22 | 46 | 21 |
| 10 | 1 | 5 | 6 | 59 | 0 | 0 | 3 | 1 | 1 | 0 | 6 | 0 | 3 | 1 | 3 | 22 | 46 | 20 |
| 11 | 1 | 11 | 6 | 59 | 1 | 0 | 4 | 0 | 1 | 6 | 5 | 0 | 4 | 0 | 3 | 22 | 47 | 19 |
| 12 | 1 | 17 | 7 | 58 | 0 | 0 | 4 | 0 | 1 | 11 | 6 | 0 | 4 | 1 | 3 | 22 | 47 | 18 |
| 13 | 1 | 24 | 6 | 58 | 0 | 0 | 4 | 0 | 1 | 17 | 6 | 0 | 5 | 0 | 3 | 22 | 47 | 17 |
| 14 | 1 | 30 | 6 | 58 | 1 | 0 | 4 | 1 | 1 | 23 | 5 | 0 | 5 | 0 | 3 | 22 | 48 | 16 |
| 15 | 1 | 36 | 7 | 57 | 0 | 0 | 5 | 0 | 1 | 28 | 6 | 0 | 6 | 1 | 3 | 22 | 48 | 15 |
| 16 | 1 | 43 | 6 | 57 | 1 | 0 | 5 | 0 | 1 | 34 | 6 | 0 | 6 | 1 | 3 | 22 | 48 | 14 |
| 17 | 1 | 49 | 6 | 56 | 0 | 0 | 5 | 0 | 1 | 40 | 5 | 0 | 7 | 0 | 3 | 22 | 49 | 13 |
| 18 | 1 | 55 | 6 | 56 | 0 | 0 | 5 | 1 | 1 | 45 | 6 | 0 | 7 | 0 | 3 | 22 | 49 | 12 |
| 19 | 2 | 1 | 6 | 56 | 1 | 0 | 6 | 0 | 1 | 51 | 6 | 0 | 8 | 0 | 3 | 22 | 50 | 11 |
| 20 | 2 | 7 | 6 | 55 | 0 | 0 | 6 | 0 | 1 | 57 | 5 | 0 | 8 | 0 | 3 | 22 | 50 | 10 |
| 21 | 2 | 13 | 6 | 55 | 1 | 0 | 6 | 0 | 2 | 2 | 6 | 0 | 8 | 1 | 3 | 22 | 51 | 9 |
| 22 | 2 | 19 | 5 | 54 | 0 | 0 | 6 | 1 | 2 | 8 | 5 | 0 | 9 | 0 | 3 | 22 | 51 | 8 |
| 23 | 2 | 24 | 7 | 54 | 1 | 0 | 7 | 0 | 2 | 13 | 5 | 0 | 9 | 1 | 3 | 22 | 52 | 7 |
| 24 | 2 | 31 | 6 | 53 | 0 | 0 | 7 | 0 | 2 | 18 | 6 | 0 | 9 | 0 | 3 | 22 | 52 | 6 |
| 25 | 2 | 37 | 6 | 53 | 1 | 0 | 7 | 0 | 2 | 24 | 5 | 0 | 10 | 0 | 3 | 22 | 53 | 5 |
| 26 | 2 | 43 | 6 | 52 | 0 | 0 | 7 | 1 | 2 | 29 | 5 | 0 | 10 | 0 | 3 | 22 | 53 | 4 |
| 27 | 2 | 49 | 5 | 52 | 0 | 0 | 8 | 0 | 2 | 34 | 6 | 0 | 10 | 1 | 3 | 22 | 54 | 3 |
| 28 | 2 | 55 | 6 | 52 | 1 | 0 | 8 | 0 | 2 | 40 | 4 | 0 | 11 | 0 | 3 | 22 | 54 | 2 |
| 29 | 3 | 1 | 5 | 51 | 0 | 0 | 8 | 0 | 2 | 44 | 5 | 0 | 11 | 0 | 3 | 22 | 55 | 1 |
| 30 | 3 | 6 | 5 | 51 | 1 | 0 | 8 | 1 | 2 | 50 | 5 | 0 | 11 | 1 | 3 | 22 | 56 | 0 |
| | Adde | | Φ | | A | | | Φ | minue .11. | | Φ | | | Φ | | | | |

# Tabula equationum Saturni secunda

| | minue | | A | | Φ | | | A | adde | | A | | | A | Statio | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 12 | 6 | 50 | 1 | 0 | 9 | 1 | 2 | 55 | 5 | 0 | 12 | 1 | 3 | 22 | 57 | 29 |
| 2 | 3 | 18 | 6 | 50 | 0 | 0 | 9 | 0 | 3 | 0 | 5 | 0 | 12 | 0 | 3 | 22 | 58 | 28 |
| 3 | 3 | 23 | 5 | 49 | 0 | 0 | 9 | 0 | 3 | 5 | 5 | 0 | 12 | 0 | 3 | 22 | 59 | 27 |
| 4 | 3 | 29 | 6 | 49 | 1 | 0 | 9 | 0 | 3 | 10 | 5 | 0 | 12 | 1 | 3 | 23 | 0 | 26 |
| 5 | 3 | 34 | 5 | 48 | 0 | 0 | 9 | 1 | 3 | 15 | 5 | 0 | 13 | 0 | 3 | 23 | 1 | 25 |
| 6 | 3 | 39 | 5 | 48 | 1 | 0 | 10 | 0 | 3 | 20 | 5 | 0 | 13 | 0 | 3 | 23 | 2 | 24 |
| 7 | 3 | 45 | 5 | 47 | 1 | 0 | 10 | 0 | 3 | 25 | 5 | 0 | 13 | 1 | 3 | 23 | 3 | 23 |
| 8 | 3 | 50 | 5 | 46 | 0 | 0 | 10 | 0 | 3 | 30 | 5 | 0 | 14 | 1 | 3 | 23 | 4 | 22 |
| 9 | 3 | 55 | 5 | 46 | 1 | 0 | 10 | 0 | 3 | 35 | 5 | 0 | 14 | 0 | 3 | 23 | 5 | 21 |
| 10 | 4 | 0 | 5 | 45 | 0 | 0 | 10 | 1 | 3 | 40 | 5 | 0 | 14 | 1 | 3 | 23 | 6 | 20 |
| 11 | 4 | 5 | 5 | 45 | 1 | 0 | 11 | 0 | 3 | 45 | 5 | 0 | 15 | 0 | 3 | 23 | 7 | 19 |
| 12 | 4 | 10 | 5 | 44 | 0 | 0 | 11 | 0 | 3 | 49 | 4 | 0 | 15 | 0 | 3 | 23 | 8 | 18 |
| 13 | 4 | 15 | 5 | 44 | 1 | 0 | 11 | 0 | 3 | 54 | 5 | 0 | 15 | 1 | 3 | 23 | 9 | 17 |
| 14 | 4 | 20 | 5 | 43 | 0 | 0 | 11 | 0 | 3 | 59 | 4 | 0 | 16 | 0 | 3 | 23 | 10 | 16 |
| 15 | 4 | 25 | 5 | 43 | 1 | 0 | 11 | 1 | 4 | 3 | 5 | 0 | 16 | 0 | 3 | 23 | 11 | 15 |
| 16 | 4 | 30 | 5 | 42 | 0 | 0 | 12 | 0 | 4 | 8 | 5 | 0 | 16 | 1 | 3 | 23 | 12 | 14 |
| 17 | 4 | 35 | 4 | 42 | 1 | 0 | 12 | 0 | 4 | 13 | 4 | 0 | 17 | 0 | 3 | 23 | 13 | 13 |
| 18 | 4 | 39 | 5 | 41 | 1 | 0 | 12 | 0 | 4 | 17 | 5 | 0 | 17 | 0 | 3 | 23 | 14 | 12 |
| 19 | 4 | 44 | 4 | 40 | 0 | 0 | 12 | 1 | 4 | 22 | 4 | 0 | 17 | 1 | 3 | 23 | 15 | 11 |
| 20 | 4 | 48 | 4 | 40 | 1 | 0 | 13 | 0 | 4 | 26 | 4 | 0 | 18 | 0 | 3 | 23 | 16 | 10 |
| 21 | 4 | 52 | 4 | 39 | 1 | 0 | 13 | 0 | 4 | 30 | 4 | 0 | 18 | 0 | 3 | 23 | 17 | 9 |
| 22 | 4 | 56 | 5 | 38 | 1 | 0 | 13 | 1 | 4 | 34 | 4 | 0 | 18 | 1 | 3 | 23 | 18 | 8 |
| 23 | 5 | 1 | 4 | 37 | 1 | 0 | 13 | 0 | 4 | 38 | 4 | 0 | 19 | 0 | 3 | 23 | 19 | 7 |
| 24 | 5 | 5 | 4 | 36 | 1 | 0 | 14 | 0 | 4 | 42 | 4 | 0 | 19 | 0 | 3 | 23 | 20 | 6 |
| 25 | 5 | 9 | 4 | 35 | 1 | 0 | 14 | 0 | 4 | 46 | 4 | 0 | 19 | 0 | 3 | 23 | 21 | 5 |
| 26 | 5 | 13 | 4 | 35 | 1 | 0 | 14 | 1 | 4 | 50 | 3 | 0 | 19 | 0 | 3 | 23 | 22 | 4 |
| 27 | 5 | 17 | 4 | 34 | 1 | 0 | 15 | 0 | 4 | 53 | 4 | 0 | 19 | 0 | 3 | 23 | 24 | 3 |
| 28 | 5 | 21 | 4 | 33 | 1 | 0 | 15 | 0 | 4 | 57 | 4 | 0 | 19 | 1 | 3 | 23 | 25 | 2 |
| 29 | 5 | 25 | 4 | 32 | 1 | 0 | 15 | 0 | 5 | 1 | 3 | 0 | 20 | 0 | 3 | 23 | 26 | 1 |
| 30 | 5 | 29 | 4 | 31 | 1 | 0 | 15 | 1 | 5 | 4 | 4 | 0 | 20 | 0 | 3 | 23 | 28 | 0 |
| | Adde | | Φ | | A | | | Φ | minue .10. | | Φ | | | Φ | prima | | | |

# Tabula equationum Saturni Tercia

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| Gra signi | Equatio centri S | m | Dra A | Gra prop. longio. m | Dra | Longitudo longior S | m | Dra A | Equatio argumenti S | m | Dra A | Longitudo propior S | m | Dra A | Statio prima S | G | M | Gra signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 | 35 | 4 | 29 | 1 | 0 | 16 | 0 | 5 | 8 | 4 | 0 | 20 | 0 | 3 | 23 | 29 | 29 |
| 2 | 5 | 38 | 4 | 28 | 1 | 0 | 16 | 0 | 5 | 12 | 4 | 0 | 20 | 0 | 3 | 23 | 30 | 28 |
| 3 | 5 | 41 | 3 | 27 | 1 | 0 | 16 | 0 | 5 | 15 | 4 | 0 | 20 | 0 | 3 | 23 | 32 | 27 |
| 4 | 5 | 44 | 3 | 26 | 1 | 0 | 16 | 0 | 5 | 19 | 3 | 0 | 20 | 0 | 3 | 23 | 33 | 26 |
| 5 | 5 | 47 | 3 | 25 | 1 | 0 | 16 | 0 | 5 | 22 | 3 | 0 | 20 | 0 | 3 | 23 | 34 | 25 |
| 6 | 5 | 50 | 3 | 24 | 1 | 0 | 17 | 0 | 5 | 25 | 3 | 0 | 20 | 0 | 3 | 23 | 36 | 24 |
| 7 | 5 | 53 | 3 | 23 | 1 | 0 | 17 | 0 | 5 | 28 | 3 | 0 | 21 | 0 | 3 | 23 | 37 | 23 |
| 8 | 5 | 56 | 3 | 22 | 1 | 0 | 17 | 0 | 5 | 31 | 3 | 0 | 21 | 0 | 3 | 23 | 38 | 22 |
| 9 | 5 | 59 | 3 | 21 | 1 | 0 | 17 | 0 | 5 | 34 | 3 | 0 | 21 | 0 | 3 | 23 | 40 | 21 |
| 10 | 6 | 2 | 3 | 20 | 1 | 0 | 17 | 0 | 5 | 37 | 3 | 0 | 21 | 0 | 3 | 23 | 41 | 20 |
| 11 | 6 | 5 | 2 | 19 | 1 | 0 | 17 | 1 | 5 | 40 | 2 | 0 | 21 | 0 | 3 | 23 | 42 | 19 |
| 12 | 6 | 7 | 2 | 18 | 1 | 0 | 18 | 0 | 5 | 42 | 2 | 0 | 21 | 0 | 3 | 23 | 44 | 18 |
| 13 | 6 | 9 | 3 | 16 | 2 | 0 | 18 | 0 | 5 | 45 | 3 | 0 | 21 | 0 | 3 | 23 | 45 | 17 |
| 14 | 6 | 12 | 2 | 15 | 1 | 0 | 18 | 0 | 5 | 47 | 2 | 0 | 21 | 0 | 3 | 23 | 47 | 16 |
| 15 | 6 | 14 | 2 | 14 | 1 | 0 | 18 | 0 | 5 | 49 | 2 | 0 | 21 | 0 | 3 | 23 | 49 | 15 |
| 16 | 6 | 16 | 2 | 13 | 1 | 0 | 18 | 0 | 5 | 51 | 2 | 0 | 21 | 0 | 3 | 23 | 51 | 14 |
| 17 | 6 | 18 | 1 | 12 | 1 | 0 | 18 | 0 | 5 | 53 | 2 | 0 | 21 | 0 | 3 | 23 | 53 | 13 |
| 18 | 6 | 19 | 2 | 11 | 2 | 0 | 18 | 0 | 5 | 55 | 2 | 0 | 21 | 1 | 3 | 23 | 55 | 12 |
| 19 | 6 | 21 | 1 | 9 | 1 | 0 | 18 | 0 | 5 | 57 | 2 | 0 | 22 | 0 | 3 | 23 | 57 | 11 |
| 20 | 6 | 22 | 1 | 8 | 1 | 0 | 18 | 0 | 5 | 59 | 1 | 0 | 22 | 0 | 3 | 23 | 58 | 10 |
| 21 | 6 | 23 | 1 | 7 | 1 | 0 | 18 | 1 | 6 | 0 | 2 | 0 | 22 | 0 | 3 | 23 | 59 | 9 |
| 22 | 6 | 25 | 2 | 6 | 1 | 0 | 19 | 0 | 6 | 2 | 2 | 0 | 22 | 0 | 3 | 24 | 1 | 8 |
| 23 | 6 | 26 | 1 | 5 | 1 | 0 | 19 | 0 | 6 | 4 | 2 | 0 | 22 | 0 | 3 | 24 | 3 | 7 |
| 24 | 6 | 27 | 1 | 4 | 1 | 0 | 19 | 0 | 6 | 5 | 1 | 0 | 22 | 0 | 3 | 24 | 4 | 6 |
| 25 | 6 | 28 | 0 | 3 | 1 | 0 | 19 | 0 | 6 | 7 | 1 | 0 | 22 | 1 | 3 | 24 | 6 | 5 |
| 26 | 6 | 28 | 1 | 2 | 1 | 0 | 19 | 0 | 6 | 8 | 1 | 0 | 22 | 1 | 3 | 24 | 7 | 4 |
| 27 | 6 | 29 | 1 | 1 prior | 0 | 0 | 19 | 0 | 6 | 9 | 1 | 0 | 23 | 0 | 3 | 24 | 8 | 3 |
| 28 | 6 | 30 | 0 | 1 | 1 | 0 | 19 | 0 | 6 | 10 | 1 | 0 | 23 | 0 | 3 | 24 | 9 | 2 |
| 29 | 6 | 30 | 1 | 2 | 1 | 0 | 19 | 0 | 6 | 11 | 1 | 0 | 23 | 0 | 3 | 24 | 10 | 1 |
| 30 | 6 | 31 | 0 | 3 | 1 | 0 | 19 | 0 | 6 | 11 | 1 | 0 | 23 | 0 | 3 | 24 | 11 | 0 |
|  | Adde | Φ | A S |  |  | ~~Subtrahe~~ | Φ | Subtrahe ·9· | Φ |  |  |  | Φ |  |  |  |  |  |

# Tabula equationum Saturni Quarta

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| Gra | Subtra S | m | Φ A | prior m | A |  |  | Φ A | adde S | m | Φ A |  |  | Φ A | Statio S | G | M | Gra |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6 |  | 0 | 4 | 1 | 0 | 19 | 0 | 6 | 12 | 0 | 0 | 23 | 0 | 3 | 24 | 12 | 29 |
| 2 | 6 | 31 | 0 | 5 | 1 | 0 | 20 | 1 | 6 | 12 | 0 | 0 | 23 | 0 | 3 | 24 | 13 | 28 |
| 3 | 6 | 31 | 0 | 6 | 1 | 0 | 20 | 0 | 6 | 12 | 0 | 0 | 23 | 0 | 3 | 24 | 14 | 27 |
| 4 | 6 | 31 | 0 | 7 | 1 | 0 | 20 | 0 | 6 | 13 | 1 | 0 | 24 | 1 | 3 | 24 | 16 | 26 |
| 5 | 6 | 31 | 0 | 8 | 1 | 0 | 20 | 0 | 6 | 13 | 0 | 0 | 24 | 0 | 3 | 24 | 18 | 25 |
| 6 | 6 | 30 | 0 | 9 | 1 | 0 | 20 | 0 | 6 | 13 | 0 | 0 | 24 | 0 | 3 | 24 | 19 | 24 |
| 7 | 6 | 30 | 0 | 10 | 1 | 0 | 20 | 0 | 6 | 13 | 0 | 0 | 24 | 0 | 3 | 24 | 20 | 23 |
| 8 | 6 | 29 | 0 | 11 | 1 | 0 | 20 | 0 | 6 | 13 | 0 | 0 | 24 | 0 | 3 | 24 | 22 | 22 |
| 9 | 6 | 29 | 0 | 12 | 1 | 0 | 20 | 1 | 6 | 13 | 1 | 0 | 24 | 0 | 3 | 24 | 23 | 21 |
| 10 | 6 | 28 | 1 | 13 | 1 | 0 | 21 | 0 | 6 | 12 | 1 | 0 | 24 | 0 | 3 | 24 | 24 | 20 |
| 11 | 6 | 28 | 1 | 14 | 1 | 0 | 21 | 0 | 6 | 12 | 0 | 0 | 24 | 0 | 3 | 24 | 26 | 19 |
| 12 | 6 | 27 | 1 | 14 | 0 | 0 | 21 | 0 | 6 | 12 | 0 | 0 | 25 | 1 | 3 | 24 | 27 | 18 |
| 13 | 6 | 26 | 1 | 14 | 1 | 0 | 21 | 0 | 6 | 11 | 1 | 0 | 25 | 0 | 3 | 24 | 28 | 17 |
| 14 | 6 | 25 | 2 | 16 | 1 | 0 | 21 | 0 | 6 | 10 | 1 | 0 | 25 | 0 | 3 | 24 | 30 | 16 |
| 15 | 6 | 24 | 1 | 17 | 1 | 0 | 21 | 0 | 6 | 9 | 1 | 0 | 25 | 0 | 3 | 24 | 31 | 15 |
| 16 | 6 | 22 | 2 | 18 | 1 | 0 | 21 | 0 | 6 | 8 | 1 | 0 | 25 | 0 | 3 | 24 | 32 | 14 |
| 17 | 6 | 21 | 2 | 19 | 1 | 0 | 21 | 1 | 6 | 7 | 2 | 0 | 25 | 0 | 3 | 24 | 33 | 13 |
| 18 | 6 | 19 | 1 | 20 | 0 | 0 | 20 | 0 | 6 | 5 | 1 | 0 | 25 | 0 | 3 | 24 | 34 | 12 |
| 19 | 6 | 17 | 2 | 20 | 1 | 0 | 20 | 0 | 6 | 4 | 2 | 0 | 25 | 0 | 3 | 24 | 36 | 11 |
| 20 | 6 | 16 | 2 | 21 | 1 | 0 | 20 | 0 | 6 | 2 | 2 | 0 | 25 | 0 | 3 | 24 | 37 | 10 |
| 21 | 6 | 14 | 2 | 22 | 1 | 0 | 20 | 0 | 6 | 0 | 1 | 0 | 25 | 1 | 3 | 24 | 39 | 9 |
| 22 | 6 | 12 | 2 | 23 | 1 | 0 | 20 | 0 | 5 | 59 | 2 | 0 | 24 | 0 | 3 | 24 | 40 | 8 |
| 23 | 6 | 10 | 2 | 24 | 1 | 0 | 20 | 1 | 5 | 57 | 2 | 0 | 24 | 0 | 3 | 24 | 41 | 7 |
| 24 | 6 | 8 | 2 | 25 | 1 | 0 | 19 | 0 | 5 | 55 | 2 | 0 | 24 | 0 | 3 | 24 | 42 | 6 |
| 25 | 6 | 6 | 2 | 26 | 0 | 0 | 19 | 0 | 5 | 53 | 2 | 0 | 24 | 0 | 3 | 24 | 44 | 5 |
| 26 | 6 | 4 | 3 | 26 | 1 | 0 | 19 | 0 | 5 | 51 | 3 | 0 | 24 | 0 | 3 | 24 | 45 | 4 |
| 27 | 5 | 1 | 3 | 27 | 1 | 0 | 19 | 0 | 5 | 48 | 2 | 0 | 24 | 1 | 3 | 24 | 47 | 3 |
| 28 | 5 | 58 | 3 | 28 | 1 | 0 | 19 | 0 | 5 | 46 | 3 | 0 | 23 | 0 | 3 | 24 | 48 | 2 |
| 29 | 5 | 55 | 3 | 29 | 1 | 0 | 19 | 0 | 5 | 43 | 2 | 0 | 23 | 0 | 3 | 24 | 49 | 1 |
| 30 | 5 | 52 | 3 | 30 | 0 | 0 | 19 | 0 | 5 | 41 | 2 | 0 | 23 | 0 | 3 | 24 | 50 | 0 |
|  | Adde | 49 | A S |  | Φ |  |  | Φ A | Subtrahe ·8· |  | Φ A |  |  | Φ A | prima |  |  |  |

# Tabula equationum Saturni Quinta

| Gra. signorum | Equatio centri S | m | Dra M | pporcio m | Dra M | Longitudo longior S | m | Dra M | Equatio argumenti S | m | Dra M | Longitudo propior S | m | Dra M | Statio prima S | G | M | Gra. sign. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 | 46 | 3 | 30 | 1 | 0 | 19 | 0 | 5 | 37 | 3 | 0 | 23 | 0 | 3 | 24 | 51 | 29 |
| 2 | 5 | 43 | 3 | 31 | 1 | 0 | 19 | 0 | 5 | 34 | 3 | 0 | 23 | 0 | 3 | 24 | 52 | 28 |
| 3 | 5 | 40 | 4 | 32 | 1 | 0 | 19 | 0 | 5 | 31 | 3 | 0 | 23 | 0 | 3 | 24 | 53 | 27 |
| 4 | 5 | 36 | 4 | 33 | 0 | 0 | 19 | 0 | 5 | 28 | 4 | 0 | 23 | 0 | 3 | 24 | 54 | 26 |
| 5 | 5 | 32 | 4 | 33 | 1 | 0 | 18 | 1 | 5 | 24 | 3 | 0 | 22 | 1 | 3 | 24 | 56 | 25 |
| 6 | 5 | 28 | 4 | 34 | 1 | 0 | 18 | 0 | 5 | 21 | 3 | 0 | 22 | 0 | 3 | 24 | 57 | 24 |
| 7 | 5 | 24 | 4 | 35 | 1 | 0 | 18 | 0 | 5 | 18 | 4 | 0 | 22 | 0 | 3 | 24 | 58 | 23 |
| 8 | 5 | 20 | 4 | 36 | 1 | 0 | 18 | 0 | 5 | 14 | 4 | 0 | 22 | 0 | 3 | 24 | 59 | 22 |
| 9 | 5 | 16 | 4 | 37 | 1 | 0 | 18 | 0 | 5 | 10 | 4 | 0 | 21 | 1 | 3 | 25 | 0 | 21 |
| 10 | 5 | 12 | 4 | 37 | 0 | 0 | 17 | 1 | 5 | 6 | 4 | 0 | 21 | 0 | 3 | 25 | 1 | 20 |
| 11 | 5 | 8 | 5 | 38 | 1 | 0 | 17 | 0 | 5 | 2 | 4 | 0 | 21 | 0 | 3 | 25 | 2 | 19 |
| 12 | 5 | 3 | 5 | 39 | 1 | 0 | 17 | 0 | 4 | 58 | 4 | 0 | 21 | 0 | 3 | 25 | 3 | 18 |
| 13 | 4 | 58 | 5 | 40 | 1 | 0 | 17 | 0 | 4 | 54 | 4 | 0 | 20 | 1 | 3 | 25 | 4 | 17 |
| 14 | 4 | 53 | 5 | 41 | 1 | 0 | 16 | 1 | 4 | 50 | 5 | 0 | 20 | 0 | 3 | 25 | 5 | 16 |
| 15 | 4 | 48 | 5 | 42 | 1 | 0 | 16 | 0 | 4 | 45 | 4 | 0 | 20 | 0 | 3 | 25 | 6 | 15 |
| 16 | 4 | 43 | 5 | 42 | 0 | 0 | 16 | 0 | 4 | 41 | 5 | 0 | 19 | 1 | 3 | 25 | 7 | 14 |
| 17 | 4 | 38 | 5 | 43 | 1 | 0 | 16 | 0 | 4 | 36 | 5 | 0 | 19 | 0 | 3 | 25 | 8 | 13 |
| 18 | 4 | 33 | 5 | 44 | 1 | 0 | 16 | 0 | 4 | 31 | 5 | 0 | 19 | 0 | 3 | 25 | 9 | 12 |
| 19 | 4 | 28 | 5 | 44 | 0 | 0 | 16 | 0 | 4 | 26 | 5 | 0 | 18 | 1 | 3 | 25 | 10 | 11 |
| 20 | 4 | 23 | 6 | 45 | 1 | 0 | 15 | 1 | 4 | 21 | 5 | 0 | 18 | 0 | 3 | 25 | 11 | 10 |
| 21 | 4 | 17 | 5 | 46 | 1 | 0 | 15 | 0 | 4 | 16 | 5 | 0 | 18 | 0 | 3 | 25 | 12 | 9 |
| 22 | 4 | 12 | 6 | 46 | 0 | 0 | 15 | 0 | 4 | 11 | 5 | 0 | 17 | 1 | 3 | 25 | 13 | 8 |
| 23 | 4 | 6 | 6 | 47 | 1 | 0 | 15 | 0 | 4 | 6 | 6 | 0 | 17 | 0 | 3 | 25 | 14 | 7 |
| 24 | 4 | 0 | 6 | 48 | 1 | 0 | 14 | 1 | 4 | 0 | 5 | 0 | 17 | 0 | 3 | 25 | 15 | 6 |
| 25 | 3 | 54 | 6 | 49 | 1 | 0 | 14 | 0 | 3 | 55 | 6 | 0 | 16 | 1 | 3 | 25 | 16 | 5 |
| 26 | 3 | 48 | 6 | 49 | 0 | 0 | 14 | 0 | 3 | 49 | 6 | 0 | 16 | 0 | 3 | 25 | 17 | 4 |
| 27 | 3 | 42 | 6 | 50 | 1 | 0 | 13 | 1 | 3 | 43 | 6 | 0 | 15 | 1 | 3 | 25 | 18 | 3 |
| 28 | 3 | 36 | 6 | 50 | 0 | 0 | 13 | 0 | 3 | 37 | 6 | 0 | 15 | 0 | 3 | 25 | 18 | 2 |
| 29 | 3 | 30 | 6 | 51 | 1 | 0 | 12 | 1 | 3 | 31 | 6 | 0 | 14 | 1 | 3 | 25 | 19 | 1 |
| 30 | 3 | 24 | 6 | 52 | 1 | 0 | 12 | 0 | 3 | 25 | 6 | 0 | 14 | 0 | 3 | 25 | 19 | 0 |
| | adde | | A | | ϴ | | | A | minue | | a | | | | | | | |

# Tabula equationum Saturni Sexta

| Gra. | minue S | m | ϴ | m | A | S | m | ϴ | adde S | m | ϴ | S | m | ϴ | Statio S | G | M | Gra. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 18 | 6 | 52 | 1 | 0 | 12 | 0 | 3 | 19 | 6 | 0 | 13 | 0 | 3 | 24 | 20 | 29 |
| 2 | 3 | 12 | 6 | 53 | 1 | 0 | 11 | 1 | 3 | 13 | 6 | 0 | 13 | 0 | 3 | 24 | 20 | 28 |
| 3 | 3 | 6 | 7 | 53 | 0 | 0 | 11 | 0 | 3 | 7 | 6 | 0 | 13 | 0 | 3 | 24 | 21 | 27 |
| 4 | 2 | 59 | 7 | 54 | 1 | 0 | 11 | 0 | 3 | 1 | 6 | 0 | 12 | 1 | 3 | 24 | 21 | 26 |
| 5 | 2 | 52 | 6 | 54 | 0 | 0 | 10 | 1 | 2 | 54 | 7 | 0 | 12 | 0 | 3 | 24 | 22 | 25 |
| 6 | 2 | 46 | 6 | 55 | 1 | 0 | 10 | 0 | 2 | 48 | 6 | 0 | 12 | 0 | 3 | 24 | 22 | 24 |
| 7 | 2 | 40 | 6 | 55 | 0 | 0 | 9 | 1 | 2 | 42 | 6 | 0 | 11 | 1 | 3 | 24 | 23 | 23 |
| 8 | 2 | 34 | 7 | 56 | 1 | 0 | 9 | 0 | 2 | 36 | 6 | 0 | 11 | 0 | 3 | 24 | 23 | 22 |
| 9 | 2 | 27 | 6 | 56 | 0 | 0 | 8 | 1 | 2 | 29 | 7 | 0 | 11 | 0 | 3 | 24 | 24 | 21 |
| 10 | 2 | 21 | 7 | 57 | 1 | 0 | 8 | 0 | 2 | 23 | 6 | 0 | 10 | 1 | 3 | 24 | 24 | 20 |
| 11 | 2 | 14 | 7 | 57 | 0 | 0 | 7 | 1 | 2 | 16 | 7 | 0 | 10 | 0 | 3 | 24 | 25 | 19 |
| 12 | 2 | 7 | 7 | 58 | 1 | 0 | 7 | 0 | 2 | 9 | 7 | 0 | 10 | 0 | 3 | 24 | 25 | 18 |
| 13 | 2 | 0 | 7 | 58 | 0 | 0 | 6 | 1 | 2 | 2 | 7 | 0 | 9 | 1 | 3 | 24 | 25 | 17 |
| 14 | 1 | 53 | 7 | 59 | 1 | 0 | 6 | 0 | 1 | 55 | 7 | 0 | 9 | 0 | 3 | 24 | 25 | 16 |
| 15 | 1 | 46 | 7 | 59 | 0 | 0 | 6 | 0 | 1 | 48 | 7 | 0 | 8 | 1 | 3 | 24 | 26 | 15 |
| 16 | 1 | 39 | 7 | 59 | 0 | 0 | 5 | 1 | 1 | 41 | 7 | 0 | 8 | 0 | 3 | 24 | 26 | 14 |
| 17 | 1 | 32 | 7 | 59 | 0 | 0 | 5 | 0 | 1 | 34 | 7 | 0 | 7 | 1 | 3 | 24 | 26 | 13 |
| 18 | 1 | 25 | 7 | 60 | 1 | 0 | 5 | 0 | 1 | 27 | 7 | 0 | 7 | 0 | 3 | 24 | 27 | 12 |
| 19 | 1 | 18 | 7 | 60 | 0 | 0 | 5 | 0 | 1 | 20 | 7 | 0 | 6 | 1 | 3 | 24 | 27 | 11 |
| 20 | 1 | 11 | 7 | 60 | 0 | 0 | 4 | 1 | 1 | 13 | 7 | 0 | 6 | 0 | 3 | 24 | 27 | 10 |
| 21 | 1 | 4 | 7 | 60 | 0 | 0 | 4 | 0 | 1 | 6 | 7 | 0 | 5 | 1 | 3 | 24 | 28 | 9 |
| 22 | 0 | 57 | 7 | 60 | 0 | 0 | 4 | 0 | 0 | 59 | 7 | 0 | 5 | 0 | 3 | 24 | 28 | 8 |
| 23 | 0 | 50 | 7 | 60 | 0 | 0 | 3 | 1 | 0 | 52 | 7 | 0 | 4 | 1 | 3 | 24 | 28 | 7 |
| 24 | 0 | 43 | 7 | 60 | 0 | 0 | 3 | 0 | 0 | 45 | 7 | 0 | 4 | 0 | 3 | 24 | 28 | 6 |
| 25 | 0 | 36 | 7 | 60 | 0 | 0 | 3 | 0 | 0 | 38 | 7 | 0 | 3 | 1 | 3 | 24 | 29 | 5 |
| 26 | 0 | 29 | 7 | 60 | 0 | 0 | 2 | 1 | 0 | 31 | 7 | 0 | 3 | 0 | 3 | 24 | 29 | 4 |
| 27 | 0 | 22 | 7 | 60 | 0 | 0 | 2 | 0 | 0 | 23 | 8 | 0 | 2 | 1 | 3 | 24 | 29 | 3 |
| 28 | 0 | 15 | 7 | 60 | 0 | 0 | 1 | 1 | 0 | 16 | 7 | 0 | 2 | 0 | 3 | 24 | 30 | 2 |
| 29 | 0 | 8 | 8 | 60 | 0 | 0 | 1 | 0 | 0 | 8 | 8 | 0 | 1 | 1 | 3 | 24 | 30 | 1 |
| 30 | 0 | 0 | 8 | 60 | 0 | 0 | 0 | 1 | 0 | 0 | 8 | 0 | 0 | 1 | 3 | 24 | 30 | 0 |
| | adde | | A | | ϴ | | | A | minue | | A | | | A | prima | | | |

# Tabula equationum Jovis prima

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| Gra signi | Equatio centri | | dra | proportio logi | dra | longitudo longior | | dra | Equatio arcus | | dra | longitudo propior | | dra | Statio prima | | | Gra signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ⊕ | | A | | S | | | A | A | | A | | | A | | | | |
| | s | m | m | m | m | s | m | m | s | m | m | s | m | m | s | g | m | |
| 1 | 0 | 6 | 6 | 60 | 0 | 0 | 0 | 1 | 0 | 10 | 10 | 0 | 0 | 1 | 4 | 4 | 5 | 29 |
| 2 | 0 | 12 | 6 | 60 | 0 | 0 | 1 | 0 | 0 | 20 | 10 | 0 | 1 | 0 | 4 | 4 | 5 | 28 |
| 3 | 0 | 18 | 6 | 60 | 0 | 0 | 1 | 0 | 0 | 29 | 9 | 0 | 1 | 0 | 4 | 4 | 5 | 27 |
| 4 | 0 | 24 | 6 | 60 | 0 | 0 | 1 | 1 | 0 | 39 | 10 | 0 | 1 | 1 | 4 | 4 | 5 | 26 |
| 5 | 0 | 30 | 6 | 60 | 0 | 0 | 2 | 0 | 0 | 49 | 9 | 0 | 2 | 0 | 4 | 4 | 5 | 25 |
| 6 | 0 | 36 | 6 | 60 | 0 | 0 | 2 | 0 | 0 | 58 | 10 | 0 | 2 | 0 | 4 | 4 | 5 | 24 |
| 7 | 0 | 42 | 6 | 60 | 0 | 0 | 2 | 1 | 1 | 8 | 10 | 0 | 2 | 1 | 4 | 4 | 6 | 23 |
| 8 | 0 | 48 | 5 | 60 | 0 | 0 | 3 | 0 | 1 | 18 | 10 | 0 | 3 | 0 | 4 | 4 | 6 | 22 |
| 9 | 0 | 53 | 6 | 60 | 0 | 0 | 3 | 0 | 1 | 28 | 9 | 0 | 3 | 0 | 4 | 4 | 6 | 21 |
| 10 | 0 | 59 | 6 | 60 | 0 | 0 | 3 | 1 | 1 | 37 | 10 | 0 | 3 | 1 | 4 | 4 | 6 | 20 |
| 11 | 1 | 5 | 6 | 60 | 0 | 0 | 4 | 0 | 1 | 47 | 10 | 0 | 4 | 0 | 4 | 4 | 6 | 19 |
| 12 | 1 | 11 | 6 | 60 | 1 | 0 | 4 | 0 | 1 | 57 | 9 | 0 | 4 | 1 | 4 | 4 | 6 | 18 |
| 13 | 1 | 17 | 6 | 59 | 0 | 0 | 4 | 1 | 2 | 6 | 9 | 0 | 5 | 0 | 4 | 4 | 7 | 17 |
| 14 | 1 | 23 | 5 | 59 | 0 | 0 | 5 | 0 | 2 | 15 | 9 | 0 | 5 | 0 | 4 | 4 | 7 | 16 |
| 15 | 1 | 28 | 6 | 59 | 0 | 0 | 5 | 0 | 2 | 24 | 10 | 0 | 5 | 1 | 4 | 4 | 7 | 15 |
| 16 | 1 | 34 | 6 | 59 | 1 | 0 | 5 | 1 | 2 | 34 | 9 | 0 | 6 | 0 | 4 | 4 | 8 | 14 |
| 17 | 1 | 40 | 5 | 58 | 0 | 0 | 6 | 0 | 2 | 43 | 9 | 0 | 6 | 1 | 4 | 4 | 8 | 13 |
| 18 | 1 | 45 | 6 | 58 | 0 | 0 | 6 | 0 | 2 | 52 | 10 | 0 | 7 | 0 | 4 | 4 | 8 | 12 |
| 19 | 1 | 51 | 6 | 58 | 1 | 0 | 6 | 1 | 3 | 2 | 9 | 0 | 7 | 1 | 4 | 4 | 9 | 11 |
| 20 | 1 | 57 | 5 | 57 | 1 | 0 | 7 | 0 | 3 | 11 | 9 | 0 | 8 | 0 | 4 | 4 | 9 | 10 |
| 21 | 2 | 2 | 6 | 57 | 0 | 0 | 7 | 0 | 3 | 20 | 9 | 0 | 8 | 0 | 4 | 4 | 9 | 9 |
| 22 | 2 | 8 | 5 | 57 | 1 | 0 | 7 | 1 | 3 | 30 | 10 | 0 | 8 | 1 | 4 | 4 | 10 | 8 |
| 23 | | 13 | 5 | 56 | 0 | 0 | 8 | 0 | 3 | 39 | 9 | 0 | 9 | 0 | 4 | 4 | 10 | 7 |
| 24 | | 18 | 5 | 56 | 1 | 0 | 8 | 0 | 3 | 48 | 9 | 0 | 9 | 0 | 4 | 4 | 11 | 6 |
| 25 | | 24 | 6 | 55 | 1 | 0 | 8 | 1 | 3 | 57 | 9 | 0 | 9 | 1 | 4 | 4 | 12 | 5 |
| 26 | | 30 | 6 | 55 | 1 | 0 | 9 | 0 | 4 | 6 | 9 | 0 | 10 | 0 | 4 | 4 | 13 | 4 |
| 27 | | 35 | 5 | 54 | 0 | 0 | 9 | 0 | 4 | 15 | 9 | 0 | 10 | 0 | 4 | 4 | 14 | 3 |
| 28 | | 41 | 6 | 54 | 1 | 0 | 9 | 0 | 4 | 24 | 9 | 0 | 10 | 1 | 4 | 4 | 15 | 2 |
| 29 | 2 | 46 | 5 | 53 | 0 | 0 | 10 | 1 | 4 | 33 | 9 | 0 | 11 | 0 | 4 | 4 | 16 | 1 |
| 30 | 2 | 51 | 5 | 53 | 1 | 0 | 10 | 0 | 4 | 42 | 9 | 0 | 11 | 0 | 4 | 4 | 17 | 0 |
| | adde | | ⊕ | | A | | | ⊕ | minue | | ⊕ | | | ⊕ | | | | |

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# Tabula equationum Jovis secunda

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| Gra signi | Equatio centri | | dra | proportio logi | dra | longitudo longior | | dra | Equatio arcus | | dra | longitudo propior | | dra | Statio | | | Gra signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | minue | | A | | ⊕ | | | A | adde | | A | | | A | Statio | | | |
| 1 | 2 | 56 | 5 | 52 | 1 | 0 | 10 | 0 | 4 | 51 | 9 | 0 | 11 | 1 | 4 | 4 | 18 | 29 |
| 2 | 3 | 1 | 5 | 51 | 0 | 0 | 11 | 1 | 5 | 0 | 9 | 0 | 12 | 0 | 4 | 4 | 19 | 28 |
| 3 | 3 | 6 | 5 | 51 | 1 | 0 | 11 | 0 | 5 | 8 | 8 | 0 | 12 | 0 | 4 | 4 | 20 | 27 |
| 4 | 3 | 11 | 5 | 50 | 1 | 0 | 11 | 1 | 5 | 17 | 9 | 0 | 12 | 1 | 4 | 4 | 21 | 26 |
| 5 | 3 | 16 | 5 | 50 | 0 | 0 | 12 | 0 | 5 | 26 | 9 | 0 | 13 | 0 | 4 | 4 | 22 | 25 |
| 6 | 3 | 21 | 5 | 49 | 1 | 0 | 12 | 0 | 5 | 34 | 8 | 0 | 13 | 0 | 4 | 4 | 23 | 24 |
| 7 | 3 | 26 | 5 | 49 | 0 | 0 | 12 | 1 | 5 | 43 | 9 | 0 | 13 | 1 | 4 | 4 | 24 | 23 |
| 8 | 3 | 31 | 5 | 48 | 1 | 0 | 13 | 0 | 5 | 52 | 8 | 0 | 14 | 0 | 4 | 4 | 25 | 22 |
| 9 | 3 | 36 | 5 | 47 | 1 | 0 | 13 | 0 | 6 | 0 | 9 | 0 | 14 | 0 | 4 | 4 | 26 | 21 |
| 10 | 3 | 41 | 5 | 47 | 0 | 0 | 13 | 1 | 6 | 9 | 8 | 0 | 14 | 1 | 4 | 4 | 27 | 20 |
| 11 | 3 | 45 | 4 | 46 | 1 | 0 | 14 | 0 | 6 | 17 | 8 | 0 | 15 | 0 | 4 | 4 | 28 | 19 |
| 12 | 3 | 49 | 4 | 46 | 0 | 0 | 14 | 0 | 6 | 25 | 8 | 0 | 15 | 0 | 4 | 4 | 29 | 18 |
| 13 | 3 | 54 | 5 | 45 | 1 | 0 | 14 | 1 | 6 | 33 | 8 | 0 | 15 | 1 | 4 | 4 | 30 | 17 |
| 14 | 3 | 59 | 4 | 44 | 1 | 0 | 15 | 0 | 6 | 41 | 8 | 0 | 16 | 0 | 4 | 4 | 31 | 16 |
| 15 | 4 | 3 | 4 | 43 | 0 | 0 | 15 | 0 | 6 | 49 | 8 | 0 | 16 | 1 | 4 | 4 | 32 | 15 |
| 16 | 4 | 8 | 5 | 43 | 1 | 0 | 15 | 1 | 6 | 57 | 8 | 0 | 17 | 0 | 4 | 4 | 33 | 14 |
| 17 | 4 | 12 | 4 | 42 | 1 | 0 | 16 | 0 | 7 | 5 | 7 | 0 | 17 | 1 | 4 | 4 | 34 | 13 |
| 18 | 4 | 16 | 4 | 41 | 1 | 0 | 16 | 0 | 7 | 12 | 8 | 0 | 18 | 0 | 4 | 4 | 36 | 12 |
| 19 | 4 | 20 | 4 | 40 | 1 | 0 | 16 | 1 | 7 | 20 | 8 | 0 | 18 | 1 | 4 | 4 | 37 | 11 |
| 20 | 4 | 24 | 4 | 39 | 1 | 0 | 17 | 0 | 7 | 28 | 7 | 0 | 19 | 0 | 4 | 4 | 38 | 10 |
| 21 | 4 | 28 | 4 | 38 | 1 | 0 | 17 | 0 | 7 | 35 | 8 | 0 | 19 | 0 | 4 | 4 | 40 | 9 |
| 22 | 4 | 32 | 4 | 37 | 1 | 0 | 17 | 1 | 7 | 43 | 7 | 0 | 19 | 1 | 4 | 4 | 42 | 8 |
| 23 | 4 | 36 | 4 | 36 | 1 | 0 | 18 | 0 | 7 | 50 | 7 | 0 | 20 | 0 | 4 | 4 | 43 | 7 |
| 24 | 4 | 39 | 3 | 35 | 1 | 0 | 18 | 0 | 7 | 57 | 7 | 0 | 20 | 0 | 4 | 4 | 44 | 6 |
| 25 | 4 | 43 | 4 | 34 | 1 | 0 | 18 | 1 | 8 | 4 | 7 | 0 | 20 | 1 | 4 | 4 | 46 | 5 |
| 26 | 4 | 47 | 4 | 33 | 0 | 0 | 19 | 0 | 8 | 11 | 6 | 0 | 21 | 0 | 4 | 4 | 48 | 4 |
| 27 | 4 | 50 | 3 | 33 | 1 | 0 | 19 | 0 | 8 | 17 | 7 | 0 | 21 | 0 | 4 | 4 | 49 | 3 |
| 28 | 4 | 54 | 4 | 32 | 1 | 0 | 19 | 1 | 8 | 24 | 7 | 0 | 21 | 1 | 4 | 4 | 51 | 2 |
| 29 | 4 | 58 | 4 | 31 | 1 | 0 | 20 | 0 | 8 | 31 | 6 | 0 | 22 | 0 | 4 | 4 | 52 | 1 |
| 30 | 5 | 1 | 3 | 30 | 1 | 0 | 20 | 0 | 8 | 37 | 7 | 0 | 22 | 0 | 4 | 4 | 53 | 0 |
| | adde | | ⊕ | | A | | | ⊕ | minue | | ⊕ | | | ⊕ | prima | | | |

·10·

# Tabula equationum Jovis Tercia

| Gradus signorum | Equatio centri | | dra | Proportio longitudinis | dra | Longitudo longior | | dra | Equatio argumenti | | dra | Longitudo propior | | dra | Statio prima | | | Gradus signorum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G | M | m | m | m | G | M | m | G | M | m | G | M | m | G | m | S | |
| 1 | 5 | 5 | 4 | 29 | 1 | 0 | 20 | 1 | 8 | 44 | 6 | 0 | 22 | 1 | 4 | 53 | 4 | 29 |
| 2 | 5 | 9 | 4 | 28 | 1 | 0 | 21 | 0 | 8 | 50 | 6 | 0 | 23 | 0 | 4 | 56 | 4 | 28 |
| 3 | 5 | 12 | 3 | 27 | 1 | 0 | 21 | 0 | 8 | 56 | 6 | 0 | 23 | 0 | 4 | 57 | 4 | 27 |
| 4 | 5 | 15 | 3 | 26 | 1 | 0 | 21 | 1 | 9 | 2 | 6 | 0 | 23 | 1 | 4 | 59 | 4 | 26 |
| 5 | 5 | 18 | 3 | 25 | 1 | 0 | 22 | 0 | 9 | 8 | 6 | 0 | 24 | 0 | 5 | 1 | 4 | 25 |
| 6 | 5 | 20 | 3 | 24 | 1 | 0 | 22 | 0 | 9 | 14 | 6 | 0 | 24 | 0 | 5 | 2 | 4 | 24 |
| 7 | 5 | 23 | 3 | 23 | 2 | 0 | 22 | 1 | 9 | 20 | 6 | 0 | 24 | 1 | 5 | 4 | 4 | 23 |
| 8 | 5 | 26 | 2 | 21 | 1 | 0 | 23 | 0 | 9 | 26 | 5 | 0 | 25 | 0 | 5 | 6 | 4 | 22 |
| 9 | 5 | 28 | 3 | 20 | 1 | 0 | 23 | 0 | 9 | 31 | 5 | 0 | 25 | 0 | 5 | 7 | 4 | 21 |
| 10 | 5 | 31 | 2 | 19 | 1 | 0 | 23 | 1 | 9 | 36 | 5 | 0 | 25 | 1 | 5 | 9 | 4 | 20 |
| 11 | 5 | 33 | 2 | 18 | 1 | 0 | 24 | 0 | 9 | 41 | 5 | 0 | 26 | 0 | 5 | 11 | 4 | 19 |
| 12 | 5 | 35 | 2 | 17 | 1 | 0 | 24 | 0 | 9 | 46 | 5 | 0 | 26 | 0 | 5 | 12 | 4 | 18 |
| 13 | 5 | 37 | 2 | 16 | 1 | 0 | 24 | 1 | 9 | 51 | 5 | 0 | 26 | 1 | 5 | 14 | 4 | 17 |
| 14 | 5 | 39 | 2 | 15 | 1 | 0 | 25 | 0 | 9 | 56 | 4 | 0 | 27 | 0 | 5 | 15 | 4 | 16 |
| 15 | 5 | 41 | 2 | 14 | 1 | 0 | 25 | 0 | 10 | 0 | 5 | 0 | 27 | 0 | 5 | 17 | 4 | 15 |
| 16 | 5 | 43 | 2 | 13 | 1 | 0 | 25 | 0 | 10 | 5 | 4 | 0 | 27 | 1 | 5 | 19 | 4 | 14 |
| 17 | 5 | 45 | 2 | 12 | 1 | 0 | 25 | 1 | 10 | 9 | 4 | 0 | 28 | 0 | 5 | 21 | 4 | 13 |
| 18 | 5 | 46 | 2 | 11 | 1 | 0 | 26 | 0 | 10 | 13 | 4 | 0 | 28 | 1 | 5 | 22 | 4 | 12 |
| 19 | 5 | 48 | 1 | 10 | 1 | 0 | 26 | 0 | 10 | 17 | 4 | 0 | 29 | 0 | 5 | 24 | 4 | 11 |
| 20 | 5 | 49 | 1 | 9 | 1 | 0 | 26 | 0 | 10 | 21 | 4 | 0 | 29 | 0 | 5 | 26 | 4 | 10 |
| 21 | 5 | 50 | 1 | 8 | 1 | 0 | 26 | 0 | 10 | 25 | 4 | 0 | 29 | 0 | 5 | 27 | 4 | 9 |
| 22 | 5 | 51 | 1 | 7 | 1 | 0 | 26 | 0 | 10 | 29 | 3 | 0 | 29 | 0 | 5 | 29 | 4 | 8 |
| 23 | 5 | 52 | 1 | 6 | 1 | 0 | 26 | 1 | 10 | 32 | 3 | 0 | 29 | 1 | 5 | 31 | 4 | 7 |
| 24 | 5 | 53 | 1 | 5 | 1 | 0 | 27 | 0 | 10 | 35 | 3 | 0 | 30 | 0 | 5 | 32 | 4 | 6 |
| 25 | 5 | 54 | 1 | 4 | 1 | 0 | 27 | 0 | 10 | 38 | 3 | 0 | 30 | 0 | 5 | 34 | 4 | 5 |
| 26 | 5 | 55 | 0 | 3 | 1 | 0 | 27 | 0 | 10 | 41 | 3 | 0 | 30 | 0 | 5 | 36 | 4 | 4 |
| 27 | 5 | 55 | 1 | 2 | 1 | 0 | 27 | 0 | 10 | 44 | 3 | 0 | 30 | 0 | 5 | 37 | 4 | 3 |
| 28 | 5 | 56 | 0 | primo | 0 | 0 | 27 | 0 | 10 | 47 | 2 | 0 | 30 | 0 | 5 | 39 | 4 | 2 |
| 29 | 5 | 56 | 1 | 1 | 1 | 0 | 27 | 0 | 10 | 49 | 2 | 0 | 30 | 0 | 5 | 41 | 4 | 1 |
| 30 | 5 | 57 | 0 | 2 | 1 | 0 | 27 | 0 | 10 | 51 | 2 | 0 | 30 | 0 | 5 | 42 | 4 | 0 |
| | adde | | | | | | | | minue | | | | | | b | c | a | |

# Tabula equationum Jovis Quarta

| Gradus signorum | minue | | dra | | dra | | | dra | adde | | dra | | | dra | Statio | | | Gradus signorum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 | 57 | 0 | 3 | 1 | 0 | 27 | 1 | 10 | 53 | 2 | 0 | 31 | 0 | 4 | 5 | 43 | 29 |
| 2 | 5 | 57 | 0 | 4 | 1 | 0 | 28 | 0 | 10 | 55 | 2 | 0 | 31 | 0 | 4 | 5 | 44 | 28 |
| 3 | 5 | 57 | 0 | 5 | 0 | 0 | 28 | 0 | 10 | 57 | 2 | 0 | 31 | 0 | 4 | 5 | 46 | 27 |
| 4 | 5 | 57 | 0 | 5 | 1 | 0 | 28 | 0 | 10 | 59 | 1 | 0 | 31 | 0 | 4 | 5 | 47 | 26 |
| 5 | 5 | 57 | 0 | 6 | 1 | 0 | 28 | 0 | 11 | 0 | 1 | 0 | 31 | 0 | 4 | 5 | 48 | 25 |
| 6 | 5 | 57 | 1 | 7 | 1 | 0 | 28 | 0 | 11 | 1 | 1 | 0 | 31 | 0 | 4 | 5 | 50 | 24 |
| 7 | 5 | 56 | 0 | 8 | 1 | 0 | 28 | 0 | 11 | 2 | 0 | 0 | 31 | 1 | 4 | 5 | 51 | 23 |
| 8 | 5 | 56 | 1 | 9 | 1 | 0 | 28 | 0 | 11 | 2 | 1 | 0 | 32 | 0 | 4 | 5 | 52 | 22 |
| 9 | 5 | 55 | 0 | 10 | 1 | 0 | 28 | 0 | 11 | 3 | 0 | 0 | 32 | 0 | 4 | 5 | 54 | 21 |
| 10 | 5 | 55 | 1 | 11 | 1 | 0 | 29 | 0 | 11 | 3 | 0 | 0 | 32 | 0 | 4 | 5 | 55 | 20 |
| 11 | 5 | 54 | 1 | 12 | 1 | 0 | 29 | 0 | 11 | 3 | 0 | 0 | 32 | 0 | 4 | 5 | 56 | 19 |
| 12 | 5 | 53 | 1 | 13 | 1 | 0 | 29 | 0 | 11 | 3 | 1 | 0 | 32 | 0 | 4 | 5 | 58 | 18 |
| 13 | 5 | 52 | 1 | 14 | 1 | 0 | 29 | 0 | 11 | 2 | 0 | 0 | 32 | 0 | 4 | 5 | 59 | 17 |
| 14 | 5 | 51 | 2 | 15 | 1 | 0 | 29 | 0 | 11 | 2 | 0 | 0 | 32 | 0 | 4 | 6 | 0 | 16 |
| 15 | 5 | 49 | 1 | 16 | 1 | 0 | 29 | 0 | 11 | 2 | 1 | 0 | 32 | 0 | 4 | 6 | 1 | 15 |
| 16 | 5 | 48 | 2 | 17 | 1 | 0 | 29 | 0 | 11 | 1 | 1 | 0 | 32 | 1 | 4 | 6 | 3 | 14 |
| 17 | 5 | 46 | 2 | 18 | 1 | 0 | 29 | 1 | 11 | 0 | 1 | 0 | 33 | 0 | 4 | 6 | 4 | 13 |
| 18 | 5 | 44 | 1 | 19 | 1 | 0 | 30 | 0 | 10 | 59 | 2 | 0 | 33 | 0 | 4 | 6 | 6 | 12 |
| 19 | 5 | 43 | 2 | 20 | 1 | 0 | 30 | 0 | 10 | 57 | 2 | 0 | 33 | 0 | 4 | 6 | 7 | 11 |
| 20 | 5 | 41 | 2 | 21 | 1 | 0 | 30 | 0 | 10 | 55 | 2 | 0 | 33 | 0 | 4 | 6 | 8 | 10 |
| 21 | 5 | 39 | 2 | 22 | 0 | 0 | 30 | 0 | 10 | 53 | 2 | 0 | 33 | 0 | 4 | 6 | 10 | 9 |
| 22 | 5 | 37 | 2 | 22 | 1 | 0 | 30 | 0 | 10 | 51 | 3 | 0 | 33 | 0 | 4 | 6 | 11 | 8 |
| 23 | 5 | 35 | 2 | 23 | 1 | 0 | 30 | 0 | 10 | 48 | 3 | 0 | 33 | 0 | 4 | 6 | 12 | 7 |
| 24 | 5 | 33 | 2 | 24 | 1 | 0 | 30 | 0 | 10 | 45 | 3 | 0 | 33 | 0 | 4 | 6 | 14 | 6 |
| 25 | 5 | 31 | 2 | 25 | 1 | 0 | 30 | 0 | 10 | 42 | 3 | 0 | 33 | 0 | 4 | 6 | 15 | 5 |
| 26 | 5 | 29 | 2 | 26 | 1 | 0 | 30 | 0 | 10 | 39 | 4 | 0 | 33 | 0 | 4 | 6 | 17 | 4 |
| 27 | 5 | 27 | 2 | 27 | 1 | 0 | 30 | 0 | 10 | 35 | 4 | 0 | 33 | 0 | 4 | 6 | 19 | 3 |
| 28 | 5 | 25 | 3 | 28 | 1 | 0 | 30 | 1 | 10 | 31 | 4 | 0 | 33 | 0 | 4 | 6 | 20 | 2 |
| 29 | 5 | 22 | 3 | 29 | 1 | 0 | 29 | 0 | 10 | 27 | 4 | 0 | 33 | 0 | 4 | 6 | 22 | 1 |
| 30 | 5 | 19 | 3 | 30 | 1 | 0 | 29 | 0 | 10 | 23 | 4 | 0 | 33 | 0 | 4 | 6 | 24 | 0 |
| | adde | | | | | | | | minue | | | | | | prima | | | |

# Tabula equationum Iovis Quinta

| Dif. Sig. | Equatio centri S | m | Dif. B m | prop. prop. m | Dif. A m | longitudo longior gr | m | Dif. B m | Equatio argumenti S A | m | Dif. B m | longitudo propior S | m | Dif. B m | Statio prima S | G | m | Dif. Sig. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 | 16 | 3 | 31 | 1 | 0 | 29 | 0 | 10 | 19 | 4 | 0 | 32 | 0 | 4 | 6 | 25 | 29 |
| 2 | 5 | 13 | 3 | 32 | 1 | 0 | 29 | 0 | 10 | 15 | 4 | 0 | 32 | 0 | 4 | 6 | 27 | 28 |
| 3 | 5 | 10 | 3 | 33 | 1 | 0 | 29 | 0 | 10 | 10 | 5 | 0 | 32 | 0 | 4 | 6 | 29 | 27 |
| 4 | 5 | 6 | 4 | 34 | 1 | 0 | 29 | 0 | 10 | 5 | 5 | 0 | 32 | 0 | 4 | 6 | 30 | 26 |
| 5 | 5 | 3 | 3 | 35 | 1 | 0 | 29 | 0 | 10 | 0 | 5 | 0 | 32 | 0 | 4 | 6 | 32 | 25 |
| 6 | 4 | 59 | 4 | 36 | 1 | 0 | 29 | 1 | 9 | 54 | 6 | 0 | 32 | 0 | 4 | 6 | 34 | 24 |
| 7 | 4 | 55 | 4 | 37 | 1 | 0 | 28 | 0 | 9 | 48 | 6 | 0 | 32 | 1 | 4 | 6 | 35 | 23 |
| 8 | 4 | 51 | 4 | 38 | 1 | 0 | 28 | 0 | 9 | 42 | 6 | 0 | 31 | 0 | 4 | 6 | 36 | 22 |
| 9 | 4 | 47 | 4 | 39 | 1 | 0 | 28 | 0 | 9 | 36 | 6 | 0 | 31 | 0 | 4 | 6 | 37 | 21 |
| 10 | 4 | 43 | 4 | 40 | 1 | 0 | 28 | 0 | 9 | 30 | 6 | 0 | 31 | 0 | 4 | 6 | 38 | 20 |
| 11 | 4 | 39 | 4 | 41 | 0 | 0 | 28 | 0 | 9 | 24 | 6 | 0 | 31 | 0 | 4 | 6 | 39 | 19 |
| 12 | 4 | 35 | 4 | 41 | 1 | 0 | 28 | 1 | 9 | 17 | 7 | 0 | 31 | 0 | 4 | 6 | 41 | 18 |
| 13 | 4 | 30 | 4 | 42 | 1 | 0 | 27 | 0 | 9 | 10 | 7 | 0 | 31 | 1 | 4 | 6 | 42 | 17 |
| 14 | 4 | 27 | 5 | 43 | 0 | 0 | 27 | 0 | 9 | 2 | 8 | 0 | 30 | 0 | 4 | 6 | 43 | 16 |
| 15 | 4 | 22 | 4 | 43 | 1 | 0 | 27 | 1 | 8 | 54 | 8 | 0 | 30 | 0 | 4 | 6 | 44 | 15 |
| 16 | 4 | 18 | 5 | 44 | 1 | 0 | 26 | 0 | 8 | 47 | 7 | 0 | 30 | 0 | 4 | 6 | 45 | 14 |
| 17 | 4 | 13 | 5 | 45 | 1 | 0 | 26 | 0 | 8 | 39 | 8 | 0 | 30 | 1 | 4 | 6 | 46 | 13 |
| 18 | 4 | 8 | 4 | 46 | 0 | 0 | 26 | 1 | 8 | 31 | 8 | 0 | 29 | 0 | 4 | 6 | 47 | 12 |
| 19 | 4 | 4 | 5 | 46 | 1 | 0 | 25 | 0 | 8 | 22 | 9 | 0 | 29 | 1 | 4 | 6 | 48 | 11 |
| 20 | 3 | 59 | 5 | 47 | 0 | 0 | 25 | 0 | 8 | 13 | 9 | 0 | 28 | 0 | 4 | 6 | 49 | 10 |
| 21 | 3 | 54 | 5 | 47 | 1 | 0 | 25 | 1 | 8 | 4 | 9 | 0 | 28 | 1 | 4 | 6 | 50 | 9 |
| 22 | 3 | 49 | 5 | 48 | 0 | 0 | 24 | 0 | 7 | 55 | 9 | 0 | 27 | 0 | 4 | 6 | 51 | 8 |
| 23 | 3 | 44 | 6 | 48 | 1 | 0 | 24 | 0 | 7 | 45 | 10 | 0 | 27 | 1 | 4 | 6 | 52 | 7 |
| 24 | 3 | 38 | 5 | 49 | 0 | 0 | 24 | 1 | 7 | 36 | 9 | 0 | 26 | 0 | 4 | 6 | 53 | 6 |
| 25 | 3 | 33 | 5 | 49 | 1 | 0 | 23 | 0 | 7 | 26 | 10 | 0 | 26 | 1 | 4 | 6 | 54 | 5 |
| 26 | 3 | 28 | 6 | 50 | 0 | 0 | 23 | 0 | 7 | 16 | 10 | 0 | 25 | 1 | 4 | 6 | 55 | 4 |
| 27 | 3 | 22 | 5 | 50 | 1 | 0 | 23 | 1 | 7 | 6 | 10 | 0 | 24 | 0 | 4 | 6 | 56 | 3 |
| 28 | 3 | 17 | 5 | 51 | 0 | 0 | 22 | 0 | 6 | 55 | 11 | 0 | 24 | 1 | 4 | 6 | 57 | 2 |
| 29 | 3 | 12 | 6 | 51 | 1 | 0 | 22 | 1 | 6 | 45 | 10 | 0 | 23 | 1 | 4 | 6 | 58 | 1 |
| 30 | 3 | 6 | 5 | 52 | 0 | 0 | 21 | 0 | 6 | 35 | 11 | 0 | 22 | 0 | 4 | 6 | 59 | 0 |
| | adde | | A | | B | | | A | minue | | A | | | A | | | | |

# Tabula equationum Iovis Sexta:~

| Sig. | minue S | m | Dif. B | m | Dif. A | gr | m | Dif. B | adde S | m | Dif. B | gr | m | Dif. B | Statio S | G | m | Sig. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 1 | 5 | 52 | 0 | 0 | 21 | 0 | 6 | 23 | 11 | 0 | 22 | 0 | 4 | 7 | 0 | 29 |
| 2 | 2 | 55 | 6 | 53 | 1 | 0 | 20 | 1 | 6 | 12 | 11 | 0 | 21 | 1 | 4 | 7 | 1 | 28 |
| 3 | 2 | 49 | 6 | 53 | 0 | 0 | 19 | 1 | 6 | 0 | 12 | 0 | 20 | 1 | 4 | 7 | 2 | 27 |
| 4 | 2 | 44 | 5 | 53 | 0 | 0 | 19 | 0 | 5 | 48 | 12 | 0 | 20 | 0 | 4 | 7 | 2 | 26 |
| 5 | 2 | 38 | 6 | 54 | 1 | 0 | 18 | 1 | 5 | 36 | 12 | 0 | 19 | 1 | 4 | 7 | 3 | 25 |
| 6 | 2 | 32 | 6 | 54 | 0 | 0 | 17 | 1 | 5 | 24 | 12 | 0 | 18 | 1 | 4 | 7 | 4 | 24 |
| 7 | 2 | 26 | 6 | 55 | 1 | 0 | 17 | 0 | 5 | 12 | 12 | 0 | 18 | 0 | 4 | 7 | 5 | 23 |
| 8 | 2 | 20 | 6 | 55 | 0 | 0 | 16 | 1 | 5 | 0 | 12 | 0 | 17 | 1 | 4 | 7 | 5 | 22 |
| 9 | 2 | 14 | 6 | 56 | 1 | 0 | 15 | 1 | 4 | 47 | 13 | 0 | 16 | 1 | 4 | 7 | 6 | 21 |
| 10 | 2 | 8 | 6 | 56 | 0 | 0 | 15 | 0 | 4 | 35 | 12 | 0 | 16 | 0 | 4 | 7 | 6 | 20 |
| 11 | 2 | 2 | 6 | 57 | 1 | 0 | 14 | 1 | 4 | 22 | 13 | 0 | 15 | 1 | 4 | 7 | 7 | 19 |
| 12 | 1 | 56 | 6 | 57 | 0 | 0 | 13 | 1 | 4 | 9 | 13 | 0 | 14 | 1 | 4 | 7 | 7 | 18 |
| 13 | 1 | 50 | 6 | 57 | 0 | 0 | 13 | 0 | 3 | 56 | 13 | 0 | 14 | 0 | 4 | 7 | 8 | 17 |
| 14 | 1 | 43 | 7 | 58 | 1 | 0 | 12 | 1 | 3 | 42 | 14 | 0 | 13 | 1 | 4 | 7 | 8 | 16 |
| 15 | 1 | 37 | 6 | 58 | 0 | 0 | 11 | 1 | 3 | 29 | 13 | 0 | 12 | 1 | 4 | 7 | 9 | 15 |
| 16 | 1 | 30 | 7 | 58 | 0 | 0 | 11 | 0 | 3 | 16 | 13 | 0 | 12 | 0 | 4 | 7 | 9 | 14 |
| 17 | 1 | 24 | 6 | 59 | 1 | 0 | 10 | 1 | 3 | 3 | 13 | 0 | 11 | 1 | 4 | 7 | 9 | 13 |
| 18 | 1 | 18 | 6 | 59 | 0 | 0 | 9 | 1 | 2 | 49 | 14 | 0 | 10 | 1 | 4 | 7 | 10 | 12 |
| 19 | 1 | 12 | 6 | 59 | 0 | 0 | 9 | 0 | 2 | 35 | 14 | 0 | 10 | 0 | 4 | 7 | 10 | 11 |
| 20 | 1 | 5 | 7 | 59 | 0 | 0 | 8 | 1 | 2 | 21 | 14 | 0 | 9 | 1 | 4 | 7 | 10 | 10 |
| 21 | 0 | 59 | 6 | 59 | 0 | 0 | 7 | 1 | 2 | 7 | 14 | 0 | 8 | 1 | 4 | 7 | 10 | 9 |
| 22 | 0 | 52 | 7 | 59 | 0 | 0 | 6 | 1 | 1 | 53 | 14 | 0 | 7 | 1 | 4 | 7 | 10 | 8 |
| 23 | 0 | 46 | 6 | 60 | 1 | 0 | 6 | 0 | 1 | 39 | 14 | 0 | 7 | 0 | 4 | 7 | 11 | 7 |
| 24 | 0 | 39 | 7 | 60 | 0 | 0 | 5 | 1 | 1 | 25 | 14 | 0 | 6 | 1 | 4 | 7 | 11 | 6 |
| 25 | 0 | 33 | 6 | 60 | 0 | 0 | 5 | 0 | 1 | 11 | 14 | 0 | 5 | 1 | 4 | 7 | 11 | 5 |
| 26 | 0 | 27 | 6 | 60 | 0 | 0 | 4 | 1 | 0 | 57 | 14 | 0 | 4 | 1 | 4 | 7 | 11 | 4 |
| 27 | 0 | 20 | 7 | 60 | 0 | 0 | 3 | 1 | 0 | 43 | 14 | 0 | 3 | 1 | 4 | 7 | 11 | 3 |
| 28 | 0 | 14 | 6 | 60 | 0 | 0 | 2 | 1 | 0 | 29 | 14 | 0 | 2 | 1 | 4 | 7 | 11 | 2 |
| 29 | 0 | 7 | 7 | 60 | 0 | 0 | 1 | 1 | 0 | 15 | 14 | 0 | 1 | 1 | 4 | 7 | 11 | 1 |
| 30 | 0 | 0 | 7 | 60 | 0 | 0 | 0 | 1 | 0 | 0 | 14 | 0 | 0 | 1 | 4 | 7 | 11 | 0 |
| | adde | | A | | B | | | A | minue | | A | | | A | prima | | | |

# Tabula equationum prima martis

| Ara sig. | Equatio centri S | m | dra | prop. | dra | longitudo longior S | m | dra | Equatio argumenti S | m | dra | longitudo propior S | m | dra | Statio prima S | G | m | Ara signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 11 | 11 | 60 | 0 | 0 | 2 | 1 | 0 | 24 | 24 | 0 | 2 | 1 | 5 | 7 | 28 | 29 |
| 2 | 0 | 22 | 11 | 60 | 0 | 0 | 3 | 1 | 0 | 48 | 24 | 0 | 3 | 1 | 5 | 7 | 29 | 28 |
| 3 | 0 | 33 | 11 | 60 | 0 | 0 | 4 | 2 | 1 | 12 | 24 | 0 | 4 | 2 | 5 | 7 | 30 | 27 |
| 4 | 0 | 44 | 11 | 60 | 0 | 0 | 6 | 1 | 1 | 36 | 24 | 0 | 6 | 1 | 5 | 7 | 31 | 26 |
| 5 | 0 | 55 | 10 | 60 | 0 | 0 | 7 | 1 | 2 | 0 | 24 | 0 | 7 | 2 | 5 | 7 | 32 | 25 |
| 6 | 1 | 5 | 11 | 60 | 1 | 0 | 8 | 2 | 2 | 24 | 24 | 0 | 9 | 1 | 5 | 7 | 33 | 24 |
| 7 | 1 | 16 | 11 | 59 | 0 | 0 | 10 | 1 | 2 | 48 | 24 | 0 | 10 | 2 | 5 | 7 | 34 | 23 |
| 8 | 1 | 27 | 11 | 59 | 0 | 0 | 11 | 1 | 3 | 12 | 24 | 0 | 12 | 1 | 5 | 7 | 34 | 22 |
| 9 | 1 | 38 | 11 | 59 | 0 | 0 | 12 | 2 | 3 | 36 | 23 | 0 | 13 | 2 | 5 | 7 | 35 | 21 |
| 10 | 1 | 49 | 11 | 59 | 0 | 0 | 14 | 2 | 3 | 59 | 24 | 0 | 15 | 1 | 5 | 7 | 36 | 20 |
| 11 | 2 | 0 | 10 | 59 | 0 | 0 | 15 | 1 | 4 | 23 | 23 | 0 | 16 | 2 | 5 | 7 | 37 | 19 |
| 12 | 2 | 10 | 11 | 59 | 1 | 0 | 16 | 1 | 4 | 46 | 24 | 0 | 18 | 2 | 5 | 7 | 38 | 18 |
| 13 | 2 | 21 | 11 | 58 | 0 | 0 | 18 | 2 | 5 | 10 | 24 | 0 | 20 | 1 | 5 | 7 | 39 | 17 |
| 14 | 2 | 32 | 10 | 58 | 0 | 0 | 19 | 1 | 5 | 34 | 23 | 0 | 21 | 2 | 5 | 7 | 40 | 16 |
| 15 | 2 | 42 | 11 | 58 | 1 | 0 | 20 | 1 | 5 | 57 | 24 | 0 | 23 | 1 | 5 | 7 | 42 | 15 |
| 16 | 2 | 53 | 10 | 57 | 0 | 0 | 22 | 2 | 6 | 21 | 23 | 0 | 24 | 2 | 5 | 7 | 44 | 14 |
| 17 | 3 | 3 | 10 | 57 | 0 | 0 | 23 | 1 | 6 | 44 | 24 | 0 | 26 | 2 | 5 | 7 | 45 | 13 |
| 18 | 3 | 13 | 11 | 57 | 1 | 0 | 24 | 2 | 7 | 8 | 24 | 0 | 28 | 1 | 5 | 7 | 47 | 12 |
| 19 | 3 | 24 | 11 | 56 | 0 | 0 | 26 | 1 | 7 | 32 | 24 | 0 | 29 | 2 | 5 | 7 | 49 | 11 |
| 20 | 3 | 35 | 10 | 56 | 0 | 0 | 27 | 1 | 7 | 56 | 23 | 0 | 31 | 1 | 5 | 7 | 51 | 10 |
| 21 | 3 | 45 | 11 | 56 | 1 | 0 | 28 | 2 | 8 | 19 | 24 | 0 | 32 | 1 | 5 | 7 | 52 | 9 |
| 22 | 3 | 56 | 10 | 55 | 0 | 0 | 30 | 2 | 8 | 43 | 23 | 0 | 34 | 1 | 5 | 7 | 54 | 8 |
| 23 | 4 | 6 | 10 | 55 | 0 | 0 | 32 | 2 | 9 | 6 | 24 | 0 | 35 | 2 | 5 | 7 | 56 | 7 |
| 24 | 4 | 16 | 10 | 55 | 1 | 0 | 33 | 1 | 9 | 30 | 24 | 0 | 37 | 1 | 5 | 7 | 59 | 6 |
| 25 | 4 | 26 | 10 | 54 | 0 | 0 | 35 | 2 | 9 | 54 | 24 | 0 | 38 | 2 | 5 | 8 | 0 | 5 |
| 26 | 4 | 36 | 10 | 54 | 1 | 0 | 37 | 1 | 10 | 18 | 23 | 0 | 40 | 1 | 5 | 8 | 4 | 4 |
| 27 | 4 | 46 | 10 | 53 | 0 | 0 | 38 | 1 | 10 | 41 | 24 | 0 | 41 | 2 | 5 | 8 | 6 | 3 |
| 28 | 4 | 56 | 10 | 53 | 0 | 0 | 40 | 2 | 11 | 5 | 23 | 0 | 43 | 1 | 5 | 8 | 9 | 2 |
| 29 | 5 | 6 | 10 | 52 | 0 | 0 | 41 | 1 | 11 | 28 | 23 | 0 | 44 | 2 | 5 | 8 | 12 | 1 |
| 30 | 5 | 16 | 10 | 52 | 1 | 0 | 42 | 2 | 11 | 51 | 24 | 0 | 46 | 2 | 5 | 8 | 15 | 0 |
| | adde | | | | | | | | minue | | | | | | | | | |

# Tabula equationum Martis secunda

| | minue | | | | | | | | adde | | | | | | Statio | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 | 26 | 10 | 51 | 0 | 0 | 44 | 1 | 12 | 15 | 23 | 0 | 48 | 2 | 5 | 8 | 18 | 29 |
| 2 | 5 | 36 | 10 | 51 | 1 | 0 | 45 | 2 | 12 | 38 | 23 | 0 | 50 | 1 | 5 | 8 | 21 | 28 |
| 3 | 5 | 47 | 9 | 50 | 0 | 0 | 47 | 1 | 13 | 1 | 24 | 0 | 51 | 2 | 5 | 8 | 24 | 27 |
| 4 | 5 | 55 | 10 | 50 | 1 | 0 | 48 | 2 | 13 | 25 | 23 | 0 | 53 | 2 | 5 | 8 | 27 | 26 |
| 5 | 6 | 4 | 9 | 49 | 0 | 0 | 50 | 1 | 13 | 48 | 23 | 0 | 55 | 1 | 5 | 8 | 30 | 25 |
| 6 | 6 | 13 | 9 | 49 | 1 | 0 | 51 | 2 | 14 | 11 | 23 | 0 | 56 | 2 | 5 | 8 | 33 | 24 |
| 7 | 6 | 22 | 9 | 48 | 1 | 0 | 53 | 1 | 14 | 34 | 23 | 0 | 58 | 2 | 5 | 8 | 37 | 23 |
| 8 | 6 | 31 | 9 | 47 | 1 | 0 | 54 | 1 | 14 | 57 | 23 | 1 | 0 | 1 | 5 | 8 | 41 | 22 |
| 9 | 6 | 40 | 9 | 47 | 0 | 0 | 56 | 2 | 15 | 20 | 23 | 1 | 1 | 2 | 5 | 8 | 44 | 21 |
| 10 | 6 | 49 | 9 | 46 | 1 | 0 | 57 | 1 | 15 | 43 | 23 | 1 | 3 | 2 | 5 | 8 | 49 | 20 |
| 11 | 6 | 58 | 9 | 45 | 0 | 0 | 59 | 2 | 16 | 6 | 23 | 1 | 5 | 1 | 5 | 8 | 53 | 19 |
| 12 | 7 | 7 | 9 | 45 | 0 | 1 | 0 | 1 | 16 | 29 | 23 | 1 | 6 | 2 | 5 | 8 | 57 | 18 |
| 13 | 7 | 16 | 9 | 44 | 0 | 1 | 2 | 2 | 16 | 52 | 23 | 1 | 8 | 2 | 5 | 9 | 2 | 17 |
| 14 | 7 | 24 | 8 | 44 | 0 | 1 | 3 | 1 | 17 | 15 | 23 | 1 | 10 | 1 | 5 | 9 | 6 | 16 |
| 15 | 7 | 32 | 8 | 43 | 1 | 1 | 5 | 2 | 17 | 38 | 23 | 1 | 11 | 2 | 5 | 9 | 9 | 15 |
| 16 | 7 | 41 | 9 | 42 | 1 | 1 | 6 | 2 | 18 | 1 | 23 | 1 | 13 | 2 | 5 | 9 | 13 | 14 |
| 17 | 7 | 49 | 8 | 41 | 1 | 1 | 8 | 1 | 18 | 24 | 24 | 1 | 15 | 1 | 5 | 9 | 17 | 13 |
| 18 | 7 | 57 | 8 | 40 | 0 | 1 | 9 | 2 | 18 | 46 | 23 | 1 | 16 | 2 | 5 | 9 | 21 | 12 |
| 19 | 8 | 5 | 8 | 40 | 1 | 1 | 11 | 1 | 19 | 9 | 22 | 1 | 18 | 2 | 5 | 9 | 26 | 11 |
| 20 | 8 | 13 | 7 | 39 | 1 | 1 | 12 | 2 | 19 | 31 | 22 | 1 | 20 | 2 | 5 | 9 | 31 | 10 |
| 21 | 8 | 20 | 7 | 38 | 1 | 1 | 14 | 1 | 19 | 53 | 22 | 1 | 22 | 2 | 5 | 9 | 36 | 9 |
| 22 | 8 | 27 | 8 | 37 | 1 | 1 | 15 | 2 | 20 | 16 | 22 | 1 | 24 | 2 | 5 | 9 | 41 | 8 |
| 23 | 8 | 35 | 7 | 36 | 1 | 1 | 17 | 1 | 20 | 38 | 22 | 1 | 26 | 2 | 5 | 9 | 46 | 7 |
| 24 | 8 | 42 | 8 | 35 | 1 | 1 | 18 | 2 | 21 | 0 | 22 | 1 | 28 | 2 | 5 | 9 | 51 | 6 |
| 25 | 8 | 50 | 7 | 34 | 1 | 1 | 20 | 1 | 21 | 23 | 22 | 1 | 30 | 2 | 5 | 9 | 56 | 5 |
| 26 | 8 | 57 | 7 | 33 | 1 | 1 | 21 | 2 | 21 | 45 | 22 | 1 | 32 | 2 | 5 | 9 | 1 | 4 |
| 27 | 9 | 4 | 7 | 32 | 1 | 1 | 23 | 2 | 22 | 7 | 22 | 1 | 34 | 2 | 5 | 9 | 6 | 3 |
| 28 | 9 | 11 | 7 | 31 | 1 | 1 | 24 | 1 | 22 | 29 | 22 | 1 | 36 | 2 | 5 | 9 | 11 | 2 |
| 29 | 9 | 18 | 6 | 30 | 1 | 1 | 26 | 2 | 22 | 51 | 22 | 1 | 38 | 2 | 5 | 9 | 16 | 1 |
| 30 | 9 | 24 | 6 | 30 | 0 | 1 | 27 | 2 | 23 | 13 | 22 | 1 | 40 | 2 | 5 | 9 | 21 | 0 |
| | adde | | | | | | | | minue | | | | | | prima | | | |

# Tabula equationum tertia Martis

.2.

| Dra Sign | Equatio centri S | m | Dra m | proportio longior m | Dra m | longitudo longior S | m | Dra m | Equatio argumenti S | m | Dra m | longitudo propior S | m | Dra m | Statio prima S | S | m | Dra Sign m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9 | 30 | 7 | 29 | 1 | 1 | 29 | 1 | 23 | 35 | 22 | 1 | 42 | 2 | 5 | 10 | 27 | 29 |
| 2 | 9 | 37 | 6 | 28 | 1 | 1 | 30 | 2 | 23 | 57 | 21 | 1 | 44 | 2 | 5 | 10 | 33 | 28 |
| 3 | 9 | 43 | 6 | 27 | 1 | 1 | 32 | 2 | 24 | 18 | 22 | 1 | 46 | 2 | 5 | 10 | 39 | 27 |
| 4 | 9 | 49 | 6 | 26 | 1 | 1 | 34 | 2 | 24 | 40 | 21 | 1 | 48 | 2 | 5 | 10 | 44 | 26 |
| 5 | 9 | 55 | 5 | 25 | 1 | 1 | 36 | 1 | 25 | 1 | 21 | 1 | 50 | 3 | 5 | 10 | 50 | 25 |
| 6 | 10 | 0 | 5 | 24 | 1 | 1 | 37 | 2 | 25 | 22 | 22 | 1 | 53 | 2 | 5 | 10 | 56 | 24 |
| 7 | 10 | 5 | 5 | 23 | 1 | 1 | 39 | 2 | 25 | 44 | 21 | 1 | 55 | 2 | 5 | 11 | 2 | 23 |
| 8 | 10 | 10 | 5 | 22 | 1 | 1 | 41 | 2 | 26 | 5 | 21 | 1 | 57 | 2 | 5 | 11 | 8 | 22 |
| 9 | 10 | 15 | 5 | 21 | 1 | 1 | 43 | 2 | 26 | 26 | 21 | 1 | 59 | 2 | 5 | 11 | 14 | 21 |
| 10 | 10 | 20 | 5 | 20 | 1 | 1 | 45 | 2 | 26 | 47 | 21 | 2 | 1 | 2 | 5 | 11 | 19 | 20 |
| 11 | 10 | 25 | 4 | 19 | 1 | 1 | 47 | 2 | 27 | 8 | 21 | 2 | 3 | 3 | 5 | 11 | 25 | 19 |
| 12 | 10 | 29 | 5 | 17 | 2 | 1 | 49 | 2 | 27 | 29 | 21 | 2 | 6 | 2 | 5 | 11 | 31 | 18 |
| 13 | 10 | 34 | 4 | 16 | 1 | 1 | 51 | 2 | 27 | 50 | 21 | 2 | 8 | 2 | 5 | 11 | 37 | 17 |
| 14 | 10 | 38 | 4 | 15 | 1 | 1 | 53 | 2 | 28 | 11 | 20 | 2 | 10 | 2 | 5 | 11 | 43 | 16 |
| 15 | 10 | 42 | 4 | 14 | 1 | 1 | 55 | 2 | 28 | 32 | 21 | 2 | 12 | 2 | 5 | 11 | 49 | 15 |
| 16 | 10 | 46 | 4 | 13 | 1 | 1 | 57 | 2 | 28 | [illegible] | 20 | 2 | 14 | 2 | 5 | 11 | 56 | 14 |
| 17 | 10 | 50 | 3 | 12 | 1 | 1 | 59 | 2 | 29 | 12 | 20 | 2 | 16 | 3 | 5 | 12 | 2 | 13 |
| 18 | 10 | 53 | 4 | 11 | 1 | 2 | 1 | 2 | 29 | 32 | 20 | 2 | 19 | 2 | 5 | 12 | 9 | 12 |
| 19 | 10 | 57 | 3 | 10 | 1 | 2 | 3 | 2 | 29 | 52 | 20 | 2 | 21 | 2 | 5 | 12 | 15 | 11 |
| 20 | 11 | 0 | 3 | 9 | 1 | 2 | 5 | 3 | 30 | 12 | 20 | 2 | 23 | 3 | 5 | 12 | 21 | 10 |
| 21 | 11 | 3 | 3 | 8 | 1 | 2 | 8 | 2 | 30 | 32 | 20 | 2 | 26 | 2 | 5 | 12 | 28 | 9 |
| 22 | 11 | 6 | 3 | 7 | 2 | 2 | 10 | 2 | 30 | 52 | 19 | 2 | 28 | 2 | 5 | 12 | 34 | 8 |
| 23 | 11 | 9 | 3 | 5 | 1 | 2 | 12 | 2 | 31 | 11 | 19 | 2 | 30 | 3 | 5 | 12 | 40 | 7 |
| 24 | 11 | 12 | 3 | 4 | 1 | 2 | 14 | 2 | 31 | 30 | 19 | 2 | 33 | 2 | 5 | 12 | 47 | 6 |
| 25 | 11 | [illegible] | 2 | 3 | 1 | 2 | 16 | 2 | 31 | 49 | 19 | 2 | 35 | 3 | 5 | 12 | 53 | 5 |
| 26 | 11 | 17 | 2 | 2 | 1 | 2 | 18 | 2 | 32 | 8 | 19 | 2 | 38 | 2 | 5 | 12 | 59 | 4 |
| 27 | 11 | 19 | 2 | prior 1 | 0 | 2 | 20 | 3 | 32 | 27 | 19 | 2 | 40 | 3 | 5 | 13 | 6 | 3 |
| 28 | 11 | 21 | 1 | 1 | 1 | 2 | 23 | 2 | 32 | 46 | 18 | 2 | 43 | 3 | 5 | 13 | 12 | 2 |
| 29 | 11 | 22 | 1 | 2 | 1 | 2 | 25 | 2 | 33 | 4 | 18 | 2 | 46 | 3 | 5 | 13 | 18 | 1 |
| 30 | 11 | 23 | 0 | 3 | 1 | 2 | 27 | 2 | 33 | 22 | 18 | 2 | 49 | 3 | 5 | 13 | 25 | 0 |
|  | adde |  |  |  |  |  |  |  | minue |  |  |  |  |  |  |  |  |  |

.9.

# Tabula equationum Martis Quarta

.3.

| Dra Sign | minue S | m | Dra m | proportio longior m | Dra m | longitudo longior S | m | Dra m | adde S | m | Dra m | longitudo propior S | m | Dra m | Statio S | S | m | Dra Sign m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | 23 | 1 | 4 | 1 | 2 | 30 | 2 | 33 | 40 | 18 | 2 | 52 | 3 | 5 | 13 | 31 | 29 |
| 2 | 11 | 24 | 1 | 5 | 1 | 2 | 32 | 3 | 33 | 58 | 17 | 2 | 55 | 2 | 5 | 13 | 37 | 28 |
| 3 | 11 | 24 | 0 | 6 | 1 | 2 | 35 | 2 | 34 | 15 | 17 | 2 | 57 | 3 | 5 | 13 | 41 | 27 |
| 4 | 11 | 24 | 0 | 7 | 1 | 2 | 37 | 2 | 34 | 32 | 17 | 3 | 0 | 3 | 5 | 13 | 40 | 26 |
| 5 | 11 | 24 | 0 | 8 | 1 | 2 | 39 | 3 | 34 | 49 | 17 | 3 | 3 | 3 | 5 | 13 | 51 | 25 |
| 6 | 11 | 24 | 1 | 9 | 1 | 2 | 42 | 2 | 35 | 6 | 17 | 3 | 6 | 3 | 5 | 13 | 57 | 24 |
| 7 | 11 | 23 | 0 | 10 | 1 | 2 | 44 | 3 | 35 | 23 | 17 | 3 | 9 | 3 | 5 | 14 | 3 | 23 |
| 8 | 11 | 23 | 1 | 11 | 1 | 2 | 47 | 2 | 35 | 40 | 16 | 3 | 12 | 3 | 5 | 14 | 9 | 22 |
| 9 | 11 | 22 | 1 | 12 | 1 | 2 | 49 | 2 | 35 | 56 | 16 | 3 | 15 | 4 | 5 | 14 | 14 | 21 |
| 10 | 11 | 21 | 1 | 13 | 1 | 2 | 51 | 3 | 36 | 12 | 16 | 3 | 19 | 3 | 5 | 14 | 20 | 20 |
| 11 | 11 | 20 | 1 | 14 | 1 | 2 | 54 | 2 | 36 | 28 | 15 | 3 | 22 | 3 | 5 | 14 | 26 | 19 |
| 12 | 11 | 19 | 2 | 15 | 1 | 2 | 56 | 3 | 36 | 43 | 15 | 3 | 25 | 3 | 5 | 14 | 31 | 18 |
| 13 | 11 | 17 | 2 | 16 | 0 | 2 | 59 | 3 | 36 | 58 | 15 | 3 | 28 | 4 | 5 | 14 | 34 | 17 |
| 14 | 11 | 15 | 2 | 16 | 1 | 3 | 1 | 3 | 37 | 13 | 14 | 3 | 32 | 4 | 5 | 14 | 42 | 16 |
| 15 | 11 | 13 | 2 | 17 | 1 | 3 | 4 | 3 | 37 | 27 | 14 | 3 | 36 | 3 | 5 | 14 | 48 | 15 |
| 16 | 11 | 11 | 2 | 18 | 1 | 3 | 7 | 3 | 37 | 41 | 14 | 3 | 39 | 4 | 5 | 14 | 43 | 14 |
| 17 | 11 | 9 | 3 | 19 | 1 | 3 | 10 | 3 | 37 | 55 | 14 | 3 | 43 | 4 | 5 | 14 | 49 | 13 |
| 18 | 11 | 6 | 3 | 20 | 1 | 3 | 13 | 3 | 38 | 9 | 14 | 3 | 47 | 3 | 5 | 15 | 5 | 12 |
| 19 | 11 | 3 | 3 | 21 | 1 | 3 | 16 | 3 | 38 | 23 | 13 | 3 | 50 | 4 | 5 | 15 | 11 | 11 |
| 20 | 11 | 0 | 3 | 22 | 0 | 3 | 19 | 3 | 38 | 36 | 13 | 3 | 54 | 4 | 5 | 15 | 17 | 10 |
| 21 | 10 | 57 | 4 | 22 | 1 | 3 | 22 | 3 | 38 | 48 | 12 | 3 | 58 | 3 | 5 | 15 | 22 | 9 |
| 22 | 10 | 53 | 4 | 23 | 1 | 3 | 25 | 3 | 39 | 1 | 12 | 4 | 1 | 4 | 5 | 15 | 28 | 8 |
| 23 | 10 | 49 | 4 | 24 | 1 | 3 | 28 | 4 | 39 | 13 | 11 | 4 | 5 | 4 | 5 | 15 | 34 | 7 |
| 24 | 10 | 45 | 4 | 25 | 1 | 3 | 32 | 3 | 39 | 24 | 11 | 4 | 9 | 4 | 5 | 15 | 39 | 6 |
| 25 | 10 | 41 | 4 | 26 | 1 | 3 | 35 | 4 | 39 | 35 | 11 | 4 | 13 | 4 | 5 | 15 | 44 | 5 |
| 26 | 10 | 37 | 4 | 27 | 1 | 3 | 39 | 3 | 39 | 45 | 10 | 4 | 17 | 4 | 5 | 15 | 49 | 4 |
| 27 | 10 | 33 | 4 | 27 | 0 | 3 | 42 | 4 | 39 | 55 | 10 | 4 | 21 | 5 | 5 | 15 | 55 | 3 |
| 28 | 10 | 29 | 4 | 28 | 1 | 3 | 46 | 4 | 40 | 5 | 9 | 4 | 26 | 4 | 5 | 16 | 0 | 2 |
| 29 | 10 | 25 | 4 | 29 | 1 | 3 | 50 | 4 | 40 | 14 | 8 | 4 | 30 | 5 | 5 | 16 | 6 | 1 |
| 30 | 10 | 21 | 4 | 30 | 0 | 3 | 54 | 4 | 40 | 22 |  | 4 | 35 | 4 | 5 | 16 | 11 | 0 |
|  | adde |  |  |  |  |  |  |  |  |  |  |  |  |  | prima |  |  |  |

.8.

# Tabula equacionum Martis Quinta

·4·

| Gra. com. | Equacio centri Φ | | Dva B | Min. propor. | Dva A | Longitudo longior | | Dva A | Equacio argumenti A | | Dva A B | Longitudo propior | | Dva A | Statio prima B | | | Gra. com. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | m | m | m | m | S | m | m | S | m | m | S | m | m | S | S | m | |
| 1 | 10 | 17 | 4 | 30 | 1 | 3 | 57 | 3 | 40 | 30 | 7 | 4 | 40 | 5 | 5 | 16 | 16 | 29 |
| 2 | 10 | 12 | 5 | 31 | 1 | 4 | 0 | 3 | 40 | 37 | 7 | 4 | 45 | 5 | 5 | 16 | 21 | 28 |
| 3 | 10 | 6 | 6 | 32 | 1 | 4 | 4 | 4 | 40 | 44 | 4 | 4 | 50 | 5 | 5 | 16 | 26 | 27 |
| 4 | 10 | 0 | 6 | 33 | 1 | 4 | 7 | 3 | 40 | 49 | 5 | 4 | 55 | 5 | 5 | 16 | 30 | 26 |
| 5 | 9 | 54 | 6 | 34 | 1 | 4 | 10 | 4 | 40 | 54 | 4 | 5 | 0 | 5 | 5 | 16 | 36 | 25 |
| 6 | 9 | 48 | 7 | 35 | 1 | 4 | 14 | 3 | 40 | 58 | 4 | 5 | 5 | 5 | 5 | 16 | 41 | 24 |
| 7 | 9 | 41 | 7 | 36 | 1 | 4 | 17 | 4 | 41 | 2 | 3 | 5 | 10 | 5 | 5 | 16 | 46 | 23 |
| 8 | 9 | 34 | 7 | 37 | 1 | 4 | 21 | 4 | 41 | 5 | 3 | 5 | 15 | 5 | 5 | 16 | 51 | 22 |
| 9 | 9 | 27 | 7 | 38 | 1 | 4 | 24 | 4 | 41 | 8 | 1 | 5 | 21 | 5 | 5 | 16 | 56 | 21 |
| 10 | 9 | 20 | 7 | 39 | 1 | 4 | 28 | 3 | 41 | 9 | 1 | 5 | 26 | 5 | 5 | 17 | 1 | 20 |
| 11 | 9 | 13 | 8 | 40 | 1 | 4 | 31 | 3 | 41 | 10 | 1 | 5 | 31 | 6 | 5 | 17 | 6 | 19 |
| 12 | 9 | 5 | 8 | 41 | 0 | 4 | 35 | 4 | 41 | 10 | 0 | 5 | 37 | 6 | 5 | 17 | 11 | 18 |
| 13 | 8 | 57 | 8 | 41 | 1 | 4 | 38 | 3 | 41 | 7 | 3 | 5 | 43 | 6 | 5 | 17 | 16 | 17 |
| 14 | 8 | 49 | 8 | 42 | 0 | 4 | 41 | 3 | 41 | 4 | 4 | 5 | 49 | 6 | 5 | 17 | 20 | 16 |
| 15 | 8 | 41 | 9 | 42 | 1 | 4 | 45 | 3 | 41 | 0 | 4 | 5 | 55 | 6 | 5 | 17 | 24 | 15 |
| 16 | 8 | 32 | 9 | 43 | 1 | 4 | 48 | 4 | 40 | 55 | 5 | 6 | 1 | 7 | 5 | 17 | 29 | 14 |
| 17 | 8 | 23 | 9 | 44 | 1 | 4 | 52 | 4 | 40 | 50 | 5 | 6 | 8 | 7 | 5 | 17 | 33 | 13 |
| 18 | 8 | 14 | 9 | 45 | 1 | 4 | 56 | 3 | 40 | 45 | 6 | 6 | 14 | 6 | 5 | 17 | 37 | 12 |
| 19 | 8 | 5 | 9 | 46 | 1 | 4 | 59 | 3 | 40 | 39 | 8 | 6 | 21 | 6 | 5 | 17 | 41 | 11 |
| 20 | 7 | 56 | 9 | 47 | 1 | 5 | 3 | 4 | 40 | 31 | 10 | 6 | 27 | 7 | 5 | 17 | 45 | 10 |
| 21 | 7 | 47 | 10 | 47 | 0 | 5 | 7 | 4 | 40 | 21 | 13 | 6 | 34 | 7 | 5 | 17 | 49 | 9 |
| 22 | 7 | 37 | 10 | 48 | 1 | 5 | 11 | 4 | 40 | 8 | 15 | 6 | 41 | 6 | 5 | 17 | 53 | 8 |
| 23 | 7 | 27 | 10 | 48 | 0 | 5 | 15 | 4 | 39 | 53 | 16 | 6 | 47 | 6 | 5 | 17 | 57 | 7 |
| 24 | 7 | 17 | 10 | 49 | 0 | 5 | 18 | 3 | 39 | 37 | 17 | 6 | 53 | 6 | 5 | 18 | 1 | 6 |
| 25 | 7 | 7 | 10 | 49 | 0 | 5 | 22 | 4 | 39 | 20 | 19 | 6 | 59 | 7 | 5 | 18 | 5 | 5 |
| 26 | 6 | 57 | 10 | 50 | 0 | 5 | 25 | 3 | 39 | 1 | 21 | 7 | 6 | 6 | 5 | 18 | 8 | 4 |
| 27 | 6 | 47 | 10 | 50 | 0 | 5 | 28 | 3 | 38 | 40 | 24 | 7 | 12 | 6 | 5 | 18 | 11 | 3 |
| 28 | 6 | 37 | 11 | 50 | 0 | 5 | 30 | 2 | 38 | 16 | 25 | 7 | 18 | 6 | 5 | 18 | 15 | 2 |
| 29 | 6 | 26 | 10 | 51 | 0 | 5 | 32 | 2 | 37 | 51 | 26 | 7 | 24 | 6 | 5 | 18 | 18 | 1 |
| 30 | 6 | 16 | 11 | 51 | 0 | 5 | 34 | 2 | 37 | 25 | 26 | 7 | 30 | 6 | 5 | 18 | 21 | 0 |
| | adde | | A | | Φ | | | Φ | minue | | Φ A | | | Φ | | | | |

·7·

# Tabula equacionum Martis Sexta

·5·

| | minue | | B | | A | | | A Φ | adde | | Φ | | | A Φ | Statio | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6 | 5 | 11 | 52 | 1 | 5 | 36 | 2 | 36 | 57 | 32 | 7 | 34 | 5 | 5 | 18 | 25 | 29 |
| 2 | 5 | 54 | 11 | 52 | 0 | 5 | 37 | 1 | 36 | 25 | 33 | 7 | 40 | 5 | 5 | 18 | 28 | 28 |
| 3 | 5 | 43 | 11 | 53 | 1 | 5 | 38 | 1 | 35 | 52 | 37 | 7 | 45 | 5 | 5 | 18 | 30 | 27 |
| 4 | 5 | 32 | 11 | 53 | 0 | 5 | 38 | 0 | 35 | 15 | 40 | 7 | 50 | 5 | 5 | 18 | 35 | 26 |
| 5 | 5 | 21 | 12 | 54 | 1 | 5 | 38 | 0 | 34 | 35 | 42 | 7 | 54 | 4 | 5 | 18 | 38 | 25 |
| 6 | 5 | 9 | 12 | 55 | 1 | 5 | 38 | 0 | 33 | 57 | 46 | 7 | 58 | 4 | 5 | 18 | 41 | 24 |
| 7 | 4 | 57 | 12 | 55 | 0 | 5 | 37 | 1 | 33 | 7 | 47 | 8 | 0 | 2 | 5 | 18 | 43 | 23 |
| 8 | 4 | 45 | 12 | 56 | 1 | 5 | 36 | 1 | 32 | 20 | 50 | 8 | 2 | 2 | 5 | 18 | 45 | 22 |
| 9 | 4 | 32 | 13 | 56 | 0 | 5 | 34 | 2 | 31 | 30 | 52 | 8 | 3 | 1 | 5 | 18 | 47 | 21 |
| 10 | 4 | 20 | 12 | 57 | 1 | 5 | 30 | 4 | 30 | 36 | 56 | 8 | 2 | 1 | 5 | 18 | 49 | 20 |
| 11 | 4 | 8 | 12 | 57 | 0 | 5 | 25 | 5 | 29 | 38 | 1.3 | 8 | 0 | 2 | 5 | 18 | 50 | 19 |
| 12 | 3 | 55 | 13 | 58 | 1 | 5 | 18 | 7 | 28 | 35 | 1.7 | 7 | 58 | 3 | 5 | 18 | 53 | 18 |
| 13 | 3 | 43 | 12 | 58 | 0 | 5 | 10 | 8 | 27 | 28 | 1.12 | 7 | 55 | 4 | 5 | 18 | 55 | 17 |
| 14 | 3 | 31 | 12 | 58 | 0 | 5 | 1 | 9 | 26 | 16 | 1.13 | 7 | 50 | 4 | 5 | 18 | 57 | 16 |
| 15 | 3 | 18 | 13 | 58 | 0 | 4 | 52 | 9 | 25 | 3 | 1.18 | 7 | 41 | 8 | 5 | 18 | 59 | 15 |
| 16 | 3 | 5 | 13 | 58 | 0 | 4 | 41 | 11 | 23 | 45 | 1.21 | 7 | 39 | 13 | 5 | 19 | 1 | 14 |
| 17 | 2 | 52 | 13 | 59 | 1 | 4 | 30 | 11 | 22 | 24 | 1.24 | 7 | 26 | 20 | 5 | 19 | 3 | 13 |
| 18 | 2 | 39 | 13 | 59 | 0 | 4 | 18 | 12 | 21 | 0 | 1.27 | 7 | 6 | 24 | 5 | 19 | 5 | 12 |
| 19 | 2 | 26 | 13 | 59 | 0 | 4 | 4 | 14 | 19 | [illegible] | 1.32 | 6 | 42 | 20 | 5 | 19 | 6 | 11 |
| 20 | 2 | 13 | 14 | 59 | 0 | 3 | 48 | 16 | 18 | 44 | 1.36 | 6 | 16 | 21 | 5 | 19 | 7 | 10 |
| 21 | 1 | 59 | 13 | 59 | 0 | 3 | 32 | 16 | 16 | 26 | 1.40 | 5 | 45 | 27 | 5 | 19 | 8 | 9 |
| 22 | 1 | 46 | 13 | 59 | 0 | 3 | 12 | 20 | 14 | 45 | 1.42 | 5 | 22 | 25 | 5 | 19 | 9 | 8 |
| 23 | 1 | 33 | 13 | 59 | 1 | 2 | 50 | 22 | 13 | 1 | 1.46 | 4 | 48 | 28 | 5 | 19 | 10 | 7 |
| 24 | 1 | 20 | 13 | 60 | 0 | 2 | 27 | 23 | 11 | 15 | 1.48 | 4 | 26 | 40 | 5 | 19 | 11 | 6 |
| 25 | 1 | 7 | 13 | 60 | 0 | 2 | 4 | 23 | 9 | 27 | 1.40 | 3 | 46 | 43 | 5 | 19 | 12 | 5 |
| 26 | 0 | 54 | 16 | 60 | 0 | 1 | 40 | 24 | 7 | 31 | 1.42 | 3 | 3 | 43 | 5 | 19 | 13 | 4 |
| 27 | 0 | 40 | 13 | 60 | 0 | 1 | 16 | 24 | 5 | 45 | 1.43 | 2 | 20 | 46 | 5 | 19 | 13 | 3 |
| 28 | 0 | 27 | 13 | 60 | 0 | 0 | 51 | 24 | 3 | 52 | 1.44 | 1 | 34 | 47 | 5 | 19 | 14 | 2 |
| 29 | 0 | 14 | 14 | 60 | 0 | 0 | 26 | 24 | 1 | 57 | 1.47 | 0 | 41 | 47 | 5 | 19 | 14 | 1 |
| 30 | 0 | 0 | 14 | 60 | 0 | 0 | 0 | 26 | 0 | 0 | | 0 | 0 | 47 | 5 | 19 | 15 | 0 |
| | | | A | | Φ | | | Φ A | minue | | A | | | Φ A | prima | | | |

·6·

# Tabula equacionum veneris prima

·8·

| Gra Argum | Equa° centri S | m | Dra m | portio longior m | Dra m | longitudo longior S | m | Dra m | Equacio argumenti S | m | Dra m | longitudo propior S | m | Dra m | Statio prima S | S | m | Gra Arg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ⊕ | | A | | ϴ | | | A | A | | A | | | A | | | | |
| 1 | 0 | 2 | 2 | 60 | 0 | 0 | 0 | 1 | 0 | 26 | 25 | 0 | 0 | 1 | 5 | 15 | 51 | 29 |
| 2 | 0 | 4 | 2 | 60 | 0 | 0 | 1 | 0 | 0 | 51 | 25 | 0 | 1 | 0 | 5 | 15 | 51 | 28 |
| 3 | 0 | 6 | 2 | 60 | 0 | 0 | 1 | 0 | 1 | 16 | 25 | 0 | 1 | 0 | 5 | 15 | 51 | 27 |
| 4 | 0 | 9 | 2 | 60 | 0 | 0 | 1 | 0 | 1 | 41 | 25 | 0 | 1 | 1 | 5 | 15 | 52 | 26 |
| 5 | 0 | 11 | 2 | 60 | 0 | 0 | 1 | 0 | 2 | 6 | 25 | 0 | 2 | 0 | 5 | 15 | 52 | 25 |
| 6 | 0 | 13 | 2 | 60 | 0 | 0 | 1 | 0 | 2 | 31 | 25 | 0 | 2 | 0 | 5 | 15 | 52 | 24 |
| 7 | 0 | 15 | 2 | 60 | 1 | 0 | 1 | 0 | 2 | 56 | 25 | 0 | 2 | 1 | 5 | 15 | 53 | 23 |
| 8 | 0 | 17 | 2 | 59 | 0 | 0 | 1 | 1 | 3 | 21 | 25 | 0 | 3 | 0 | 5 | 15 | 53 | 22 |
| 9 | 0 | 19 | 2 | 59 | 0 | 0 | 2 | 0 | 3 | 46 | 25 | 0 | 3 | 0 | 5 | 15 | 53 | 21 |
| 10 | 0 | 21 | 3 | 59 | 0 | 0 | 2 | 0 | 4 | 11 | 25 | 0 | 3 | 1 | 5 | 15 | 54 | 20 |
| 11 | 0 | 24 | 2 | 59 | 0 | 0 | 2 | 1 | 4 | 36 | 25 | 0 | 4 | 0 | 5 | 15 | 54 | 19 |
| 12 | 0 | 26 | 2 | 59 | 1 | 0 | 3 | 0 | 5 | 1 | 25 | 0 | 4 | 0 | 5 | 15 | 54 | 18 |
| 13 | 0 | 28 | 2 | 58 | 0 | 0 | 3 | 0 | 5 | 26 | 25 | 0 | 4 | 1 | 5 | 15 | 55 | 17 |
| 14 | 0 | 30 | 2 | 58 | 0 | 0 | 3 | 1 | 5 | 51 | 25 | 0 | 5 | 0 | 5 | 15 | 55 | 16 |
| 15 | 0 | 32 | 2 | 58 | 1 | 0 | 4 | 0 | 6 | 16 | 25 | 0 | 5 | 0 | 5 | 15 | 56 | 15 |
| 16 | 0 | 34 | 2 | 57 | 0 | 0 | 4 | 0 | 6 | 41 | 25 | 0 | 5 | 1 | 5 | 15 | 56 | 14 |
| 17 | 0 | 36 | 2 | 57 | 0 | 0 | 4 | 1 | 7 | 6 | 25 | 0 | 6 | 0 | 5 | 15 | 56 | 13 |
| 18 | 0 | 38 | 3 | 57 | 1 | 0 | 5 | 0 | 7 | 31 | 25 | 0 | 6 | 0 | 5 | 15 | 57 | 12 |
| 19 | 0 | 41 | 2 | 56 | 0 | 0 | 5 | 0 | 7 | 56 | 25 | 0 | 6 | 1 | 5 | 15 | 57 | 11 |
| 20 | 0 | 43 | 2 | 56 | 0 | 0 | 5 | 1 | 8 | 21 | 25 | 0 | 7 | 0 | 5 | 15 | 57 | 10 |
| 21 | 0 | 45 | 2 | 56 | 1 | 0 | 6 | 0 | 8 | 46 | 25 | 0 | 7 | 0 | 5 | 15 | 58 | 9 |
| 22 | 0 | 47 | 2 | 55 | 0 | 0 | 6 | 0 | 9 | 11 | 25 | 0 | 7 | 1 | 5 | 15 | 58 | 8 |
| 23 | 0 | 49 | 2 | 55 | 0 | 0 | 6 | 1 | 9 | 36 | 25 | 0 | 8 | 0 | 5 | 15 | 58 | 7 |
| 24 | 0 | 51 | 2 | 55 | 1 | 0 | 7 | 0 | 10 | 1 | 25 | 0 | 8 | 0 | 5 | 15 | 59 | 6 |
| 25 | 0 | 53 | 2 | 54 | 0 | 0 | 7 | 0 | 10 | 26 | 25 | 0 | 8 | 1 | 5 | 15 | 59 | 5 |
| 26 | 0 | 55 | 2 | 54 | 1 | 0 | 7 | 1 | 10 | 51 | 25 | 0 | 9 | 0 | 5 | 15 | 59 | 4 |
| 27 | 0 | 57 | 2 | 53 | 0 | 0 | 8 | 0 | 11 | 16 | 25 | 0 | 9 | 0 | 5 | 16 | 0 | 3 |
| 28 | 0 | 59 | 2 | 53 | 1 | 0 | 8 | 1 | 11 | 41 | 25 | 0 | 9 | 1 | 5 | 16 | 0 | 2 |
| 29 | 1 | 1 | 2 | 52 | 0 | 0 | 9 | 0 | 12 | 6 | 24 | 0 | 10 | 0 | 5 | 16 | 0 | 1 |
| 30 | 1 | 3 | 2 | 52 | 1 | 0 | 9 | 0 | 12 | 30 | 24 | 0 | 10 | 1 | 5 | 16 | 1 | 0 |
| | adde | | ⊕ | A | | | | ⊕ | minue | | ϴ | | | ⊕ | | | | |

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# Tabula equacionum veneris secunda

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| Gra Argum | S | m | Dra m | portio m | Dra m | longitudo longior S | m | Dra m | Equacio argumenti S | m | Dra m | longitudo propior S | m | Dra m | Statio S | S | m | Gra Arg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | minue | | A | | ⊕ | | | A | adde | | A | | | A | Statio | | | |
| 1 | 1 | 5 | 2 | 51 | 1 | 0 | 9 | 1 | 12 | 49 | 25 | 0 | 10 | 1 | 5 | 16 | 1 | 29 |
| 2 | 1 | 7 | 2 | 50 | 0 | 0 | 10 | 0 | 13 | 20 | 24 | 0 | 11 | 0 | 5 | 16 | 2 | 28 |
| 3 | 1 | 9 | 1 | 50 | 1 | 0 | 10 | 0 | 13 | 44 | 25 | 0 | 11 | 0 | 5 | 16 | 3 | 27 |
| 4 | 1 | 10 | 2 | 50 | 0 | 0 | 10 | 1 | 14 | 9 | 25 | 0 | 11 | 0 | 5 | 16 | 4 | 26 |
| 5 | 1 | 12 | 2 | 49 | 1 | 0 | 11 | 0 | 14 | 34 | 24 | 0 | 11 | 1 | 5 | 16 | 5 | 25 |
| 6 | 1 | 14 | 2 | 49 | 1 | 0 | 11 | 0 | 14 | 58 | 25 | 0 | 12 | 0 | 5 | 16 | 6 | 24 |
| 7 | 1 | 16 | 1 | 48 | 0 | 0 | 11 | 1 | 15 | 23 | 25 | 0 | 12 | 0 | 5 | 16 | 7 | 23 |
| 8 | 1 | 17 | 2 | 48 | 1 | 0 | 12 | 0 | 15 | 48 | 24 | 0 | 12 | 0 | 5 | 16 | 8 | 22 |
| 9 | 1 | 19 | 2 | 47 | 0 | 0 | 12 | 0 | 16 | 12 | 25 | 0 | 12 | 1 | 5 | 16 | 9 | 21 |
| 10 | 1 | 21 | 1 | 47 | 1 | 0 | 12 | 1 | 16 | 37 | 24 | 0 | 13 | 0 | 5 | 16 | 10 | 20 |
| 11 | 1 | 22 | 2 | 46 | 1 | 0 | 13 | 0 | 17 | 1 | 24 | 0 | 13 | 0 | 5 | 16 | 11 | 19 |
| 12 | 1 | 24 | 2 | 45 | 0 | 0 | 13 | 0 | 17 | 25 | 25 | 0 | 13 | 0 | 5 | 16 | 12 | 18 |
| 13 | 1 | 26 | 1 | 45 | 1 | 0 | 13 | 1 | 17 | 50 | 24 | 0 | 13 | 1 | 5 | 16 | 13 | 17 |
| 14 | 1 | 27 | 2 | 44 | 1 | 0 | 14 | 0 | 18 | 14 | 24 | 0 | 14 | 0 | 5 | 16 | 14 | 16 |
| 15 | 1 | 29 | 2 | 43 | 1 | 0 | 14 | 0 | 18 | 38 | 25 | 0 | 14 | 0 | 5 | 16 | 15 | 15 |
| 16 | 1 | 31 | 1 | 42 | 0 | 0 | 14 | 1 | 19 | 3 | 24 | 0 | 14 | 1 | 5 | 16 | 16 | 14 |
| 17 | 1 | 32 | 2 | 42 | 1 | 0 | 15 | 0 | 19 | 27 | 24 | 0 | 15 | 0 | 5 | 16 | 17 | 13 |
| 18 | 1 | 34 | 2 | 41 | 1 | 0 | 15 | 0 | 19 | 51 | 24 | 0 | 15 | 0 | 5 | 16 | 18 | 12 |
| 19 | 1 | 36 | 1 | 40 | 0 | 0 | 15 | 1 | 20 | 15 | 24 | 0 | 15 | 1 | 5 | 16 | 19 | 11 |
| 20 | 1 | 37 | 2 | 40 | 1 | 0 | 16 | 0 | 20 | 39 | 24 | 0 | 16 | 0 | 5 | 16 | 20 | 10 |
| 21 | 1 | 39 | 1 | 39 | 1 | 0 | 16 | 0 | 21 | 3 | 24 | 0 | 16 | 0 | 5 | 16 | 21 | 9 |
| 22 | 1 | 40 | 2 | 38 | 1 | 0 | 16 | 1 | 21 | 27 | 24 | 0 | 16 | 1 | 5 | 16 | 22 | 8 |
| 23 | 1 | 42 | 1 | 37 | 1 | 0 | 17 | 0 | 21 | 51 | 24 | 0 | 17 | 0 | 5 | 16 | 23 | 7 |
| 24 | 1 | 43 | 1 | 36 | 1 | 0 | 17 | 0 | 22 | 15 | 24 | 0 | 17 | 0 | 5 | 16 | 24 | 6 |
| 25 | 1 | 44 | 2 | 35 | 1 | 0 | 17 | 1 | 22 | 39 | 24 | 0 | 17 | 1 | 5 | 16 | 25 | 5 |
| 26 | 1 | 46 | 1 | 34 | 1 | 0 | 18 | 0 | 23 | 3 | 24 | 0 | 18 | 0 | 5 | 16 | 26 | 4 |
| 27 | 1 | 47 | 1 | 33 | 1 | 0 | 18 | 0 | 23 | 27 | 24 | 0 | 18 | 0 | 5 | 16 | 27 | 3 |
| 28 | 1 | 48 | 2 | 32 | 1 | 0 | 18 | 1 | 23 | 51 | 24 | 0 | 18 | 1 | 5 | 16 | 28 | 2 |
| 29 | 1 | 50 | 1 | 31 | 1 | 0 | 19 | 0 | 24 | 15 | 23 | 0 | 19 | 0 | 5 | 16 | 29 | 1 |
| 30 | 1 | 51 | 1 | 30 | 1 | 0 | 19 | 0 | 24 | 38 | 24 | 0 | 19 | 0 | 5 | 16 | 30 | 0 |
| | adde | | ⊕ | A | | | | ⊕ | minue | | ⊕ | | | ⊕ | prima | | | |

·10·

# Tabula equationum Veneris Tertia

.2.

| Gra signa | Equatio centri g | m | dra | pro longior m | dra | longitudo longior g | m | dra | Equatio argumenti g | m | dra | longitudo propior g | m | dra | Statio prima s | g | m | Gra signa |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 52 | 1 | 29 | 1 | 0 | 19 | 1 | 25 | 2 | 23 | 0 | 19 | 1 | 5 | 16 | 31 | 29 |
| 2 | 1 | 53 | 1 | 28 | 1 | 0 | 20 | 0 | 25 | 25 | 23 | 0 | 20 | 0 | 5 | 16 | 32 | 28 |
| 3 | 1 | 54 | 1 | 27 | 1 | 0 | 20 | 0 | 25 | 48 | 23 | 0 | 20 | 1 | 5 | 16 | 33 | 27 |
| 4 | 1 | 55 | 1 | 26 | 1 | 0 | 20 | 1 | 26 | 11 | 23 | 0 | 21 | 0 | 5 | 16 | 34 | 26 |
| 5 | 1 | 56 | 1 | 25 | 1 | 0 | 21 | 0 | 26 | 34 | 23 | 0 | 21 | 1 | 5 | 16 | 35 | 25 |
| 6 | 1 | 57 | 1 | 24 | 1 | 0 | 21 | 1 | 26 | 57 | 23 | 0 | 22 | 0 | 5 | 16 | 36 | 24 |
| 7 | 1 | 58 | 1 | 23 | 1 | 0 | 22 | 0 | 27 | 20 | 23 | 0 | 22 | 1 | 5 | 16 | 37 | 23 |
| 8 | 1 | 59 | 1 | 22 | 1 | 0 | 22 | 1 | 27 | 43 | 23 | 0 | 23 | 0 | 5 | 16 | 38 | 22 |
| 9 | 2 | 0 | 1 | 21 | 1 | 0 | 23 | 0 | 28 | 6 | 23 | 0 | 23 | 1 | 5 | 16 | 39 | 21 |
| 10 | 2 | 1 | 0 | 20 | 1 | 0 | 23 | 1 | 28 | 29 | 23 | 0 | 24 | 0 | 5 | 16 | 40 | 20 |
| 11 | 2 | 1 | 1 | 19 | 1 | 0 | 24 | 0 | 28 | 52 | 22 | 0 | 24 | 1 | 5 | 16 | 41 | 19 |
| 12 | 2 | 2 | 1 | 18 | 2 | 0 | 24 | 1 | 29 | 14 | 23 | 0 | 25 | 0 | 5 | 16 | 43 | 18 |
| 13 | 2 | 3 | 0 | 16 | 1 | 0 | 25 | 0 | 29 | 37 | 22 | 0 | 25 | 1 | 5 | 16 | 45 | 17 |
| 14 | 2 | 3 | 1 | 15 | 1 | 0 | 25 | 0 | 29 | 59 | 22 | 0 | 26 | 1 | 5 | 16 | 47 | 16 |
| 15 | 2 | 4 | 1 | 14 | 1 | 0 | 25 | 1 | 30 | 21 | 22 | 0 | 27 | 0 | 5 | 16 | 49 | 15 |
| 16 | 2 | 5 | 0 | 13 | 1 | 0 | 26 | 0 | 30 | 43 | 22 | 0 | 27 | 1 | 5 | 16 | 50 | 14 |
| 17 | 2 | 5 | 1 | 12 | 1 | 0 | 26 | 0 | 31 | 5 | 22 | 0 | 28 | 0 | 5 | 16 | 52 | 13 |
| 18 | 2 | 6 | 0 | 11 | 1 | 0 | 26 | 1 | 31 | 27 | 22 | 0 | 28 | 1 | 5 | 16 | 53 | 12 |
| 19 | 2 | 6 | 1 | 10 | 1 | 0 | 27 | 0 | 31 | 49 | 22 | 0 | 29 | 0 | 5 | 16 | 54 | 11 |
| 20 | 2 | 7 | 0 | 9 | 1 | 0 | 27 | 1 | 32 | 11 | 22 | 0 | 29 | 1 | 5 | 16 | 56 | 10 |
| 21 | 2 | 7 | 1 | 8 | 1 | 0 | 28 | 0 | 32 | 33 | 22 | 0 | 30 | 0 | 5 | 16 | 58 | 9 |
| 22 | 2 | 8 | 0 | 7 | 1 | 0 | 28 | 1 | 32 | 55 | 22 | 0 | 30 | 1 | 5 | 16 | 59 | 8 |
| 23 | 2 | 8 | 1 | 6 | 1 | 0 | 29 | 1 | 33 | 17 | 21 | 0 | 31 | 0 | 5 | 17 | 0 | 7 |
| 24 | 2 | 9 | 0 | 5 | 1 | 0 | 30 | 0 | 33 | 38 | 22 | 0 | 31 | 1 | 5 | 17 | 2 | 6 |
| 25 | 2 | 9 | 0 | 4 | 1 | 0 | 30 | 1 | 34 | 0 | 21 | 0 | 32 | 0 | 5 | 17 | 3 | 5 |
| 26 | 2 | 9 | 0 | 3 | 1 | 0 | 31 | 1 | 34 | 21 | 21 | 0 | 32 | 1 | 5 | 17 | 5 | 4 |
| 27 | 2 | 9 | 1 | 2 | 1 | 0 | 32 | 0 | 34 | 42 | 21 | 0 | 33 | 0 | 5 | 17 | 6 | 3 |
| 28 | 2 | 10 | 0 | 1 | 0 | 0 | 32 | 1 | 35 | 3 | 21 | 0 | 33 | 1 | 5 | 17 | 8 | 2 |
| 29 | 2 | 10 | 0 | 1 prior | 1 | 0 | 33 | 0 | 35 | 24 | 20 | 0 | 34 | 0 | 5 | 17 | 10 | 1 |
| 30 | 2 | 10 | 0 | 2 | 1 | 0 | 33 | 1 | 35 | 44 | 20 | 0 | 34 | 1 | 5 | 17 | 11 | 0 |
|  | A |  | ⊕ | A |  |  |  | ⊕ | minue |  | ⊕ |  |  | ⊕ |  |  |  |  |

# Tabula equationum Veneris Quarta

.3.

| Gra | minue g | m | dra | prior | dra | longior g | m | dra | adde g | m | dra | propior g | m | dra | Statio s | g | m | Gra |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 10 | 0 | 3 | 1 | 0 | 34 | 1 | 36 | 4 | 20 | 0 | 35 | 1 | 5 | 17 | 12 | 29 |
| 2 | 2 | 10 | 0 | 4 | 1 | 0 | 35 | 0 | 36 | 24 | 20 | 0 | 36 | 1 | 5 | 17 | 13 | 28 |
| 3 | 2 | 10 | 0 | 5 | 1 | 0 | 35 | 1 | 36 | 44 | 20 | 0 | 37 | 0 | 5 | 17 | 14 | 27 |
| 4 | 2 | 10 | 0 | 6 | 1 | 0 | 36 | 0 | 37 | 4 | 19 | 0 | 37 | 1 | 5 | 17 | 15 | 26 |
| 5 | 2 | 10 | 0 | 7 | 1 | 0 | 36 | 1 | 37 | 23 | 20 | 0 | 38 | 0 | 5 | 17 | 16 | 25 |
| 6 | 2 | 10 | 0 | 8 | 1 | 0 | 37 | 0 | 37 | 43 | 19 | 0 | 38 | 1 | 5 | 17 | 17 | 24 |
| 7 | 2 | 10 | 0 | 9 | 1 | 0 | 37 | 1 | 38 | 2 | 19 | 0 | 39 | 1 | 5 | 17 | 18 | 23 |
| 8 | 2 | 10 | 1 | 10 | 1 | 0 | 38 | 0 | 38 | 21 | 19 | 0 | 40 | 0 | 5 | 17 | 19 | 22 |
| 9 | 2 | 9 | 0 | 11 | 1 | 0 | 38 | 1 | 38 | 40 | 19 | 0 | 40 | 1 | 5 | 17 | 20 | 21 |
| 10 | 2 | 9 | 0 | 12 | 1 | 0 | 39 | 0 | 38 | 59 | 18 | 0 | 41 | 1 | 5 | 17 | 21 | 20 |
| 11 | 2 | 9 | 1 | 13 | 1 | 0 | 39 | 1 | 39 | 17 | 18 | 0 | 42 | 1 | 5 | 17 | 22 | 19 |
| 12 | 2 | 8 | 0 | 14 | 1 | 0 | 40 | 1 | 39 | 35 | 18 | 0 | 43 | 0 | 5 | 17 | 23 | 18 |
| 13 | 2 | 8 | 1 | 15 | 1 | 0 | 41 | 0 | 39 | 53 | 18 | 0 | 43 | 1 | 5 | 17 | 24 | 17 |
| 14 | 2 | 7 | 0 | 16 | 1 | 0 | 41 | 1 | 40 | 11 | 18 | 0 | 44 | 1 | 5 | 17 | 25 | 16 |
| 15 | 2 | 7 | 1 | 17 | 1 | 0 | 42 | 1 | 40 | 29 | 17 | 0 | 45 | 1 | 5 | 17 | 26 | 15 |
| 16 | 2 | 6 | 0 | 18 | 1 | 0 | 43 | 0 | 40 | 46 | 17 | 0 | 46 | 1 | 5 | 17 | 27 | 14 |
| 17 | 2 | 6 | 1 | 19 | 1 | 0 | 43 | 1 | 41 | 3 | 17 | 0 | 47 | 0 | 5 | 17 | 28 | 13 |
| 18 | 2 | 5 | 0 | 20 | 1 | 0 | 44 | 1 | 41 | 20 | 17 | 0 | 47 | 1 | 5 | 17 | 29 | 12 |
| 19 | 2 | 5 | 1 | 21 | 1 | 0 | 45 | 1 | 41 | 37 | 16 | 0 | 48 | 1 | 5 | 17 | 30 | 11 |
| 20 | 2 | 4 | 0 | 22 | 1 | 0 | 46 | 1 | 41 | 53 | 16 | 0 | 49 | 1 | 5 | 17 | 32 | 10 |
| 21 | 2 | 4 | 1 | 23 | 1 | 0 | 47 | 1 | 42 | 9 | 15 | 0 | 50 | 1 | 5 | 17 | 33 | 9 |
| 22 | 2 | 3 | 1 | 24 | 1 | 0 | 48 | 1 | 42 | 24 | 15 | 0 | 51 | 1 | 5 | 17 | 34 | 8 |
| 23 | 2 | 2 | 1 | 25 | 1 | 0 | 49 | 1 | 42 | 39 | 14 | 0 | 52 | 0 | 5 | 17 | 36 | 7 |
| 24 | 2 | 1 | 1 | 26 | 1 | 0 | 50 | 1 | 42 | 53 | 14 | 0 | 52 | 1 | 5 | 17 | 37 | 6 |
| 25 | 2 | 0 | 1 | 27 | 1 | 0 | 51 | 0 | 43 | 7 | 14 | 0 | 53 | 1 | 5 | 17 | 38 | 5 |
| 26 | 1 | 59 | 1 | 28 | 1 | 0 | 51 | 1 | 43 | 21 | 13 | 0 | 54 | 1 | 5 | 17 | 39 | 4 |
| 27 | 1 | 58 | 1 | 29 | 1 | 0 | 52 | 1 | 43 | 35 | 13 | 0 | 55 | 1 | 5 | 17 | 41 | 3 |
| 28 | 1 | 57 | 1 | 30 | 1 | 0 | 53 | 1 | 43 | 48 | 13 | 0 | 56 | 0 | 5 | 17 | 42 | 2 |
| 29 | 1 | 56 | 1 | 31 | 0 | 0 | 54 | 0 | 44 | 1 | 12 | 0 | 56 | 1 | 5 | 17 | 43 | 1 |
| 30 | 1 | 55 | 1 | 31 | 0 | 0 | 54 | 0 | 44 | 13 | 12 | 0 | 57 | 1 | 5 | 17 | 45 | 0 |
|  | adde |  | A S |  | ⊕ |  |  | ⊕ | minue |  | ⊕ |  |  | ⊕ | prima |  |  |  |

# Tabula equationum Veneris quinta :~

| Gra. argumenti | Equatio centri | | Dif. | Minuta proporcionalia | Dif. | Longitudo longior | | Dif. | Equatio argumenti | | Dif. | Longitudo propior | | Dif. | Statio prima | | | Gra. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | G | M | M | M | M | G | M | M | G | M | M | G | M | M | S | G | M | |
| 1 | 1 | 54 | 1 | 32 | 1 | 0 | 55 | 1 | 44 | 29 | 12 | 0 | 58 | 1 | 5 | 17 | 46 | 29 |
| 2 | 1 | 53 | 1 | 33 | 1 | 0 | 56 | 1 | 44 | 30 | 11 | 0 | 59 | 1 | 5 | 17 | 48 | 28 |
| 3 | [illegible] | 52 | 2 | 34 | 1 | 0 | 57 | 1 | 44 | 47 | 10 | 1 | 0 | 1 | 5 | 17 | 49 | 27 |
| 4 | [illegible] | 50 | 1 | 35 | 1 | 0 | 58 | 1 | 44 | 57 | 9 | 1 | 1 | 1 | 5 | 17 | 50 | 26 |
| 5 | [illegible] | 49 | 1 | 36 | 1 | 0 | 59 | 1 | 45 | 6 | 8 | 1 | 2 | 1 | 5 | 17 | 51 | 25 |
| 6 | 1 | 48 | 2 | 37 | 1 | 1 | 0 | 1 | 45 | 14 | 7 | 1 | 3 | 2 | 5 | 17 | 52 | 24 |
| 7 | 1 | 46 | 1 | 38 | 1 | 1 | 1 | 1 | 45 | 21 | 6 | 1 | 5 | 1 | 5 | 17 | 53 | 23 |
| 8 | 1 | 45 | 1 | 39 | 1 | 1 | 2 | 1 | 45 | 27 | 6 | 1 | 6 | 2 | 5 | 17 | 54 | 22 |
| 9 | 1 | 44 | 2 | 40 | 0 | 1 | 3 | 1 | 45 | 33 | 6 | 1 | 8 | 1 | 5 | 17 | 54 | 21 |
| 10 | 1 | 42 | 1 | 40 | 1 | 1 | 4 | 1 | 45 | 39 | 6 | 1 | 9 | 1 | 5 | 17 | 55 | 20 |
| 11 | 1 | 40 | 2 | 41 | 1 | 1 | 5 | 1 | 45 | 45 | 5 | 1 | 10 | 1 | 5 | 17 | 56 | 19 |
| 12 | 1 | 39 | 1 | 42 | 1 | 1 | 6 | 1 | 45 | 50 | 4 | 1 | 11 | 1 | 5 | 17 | 57 | 18 |
| 13 | 1 | 38 | 2 | 43 | 1 | 1 | 7 | 2 | 45 | 54 | 3 | 1 | 12 | 1 | 5 | 17 | 57 | 17 |
| 14 | 1 | 36 | 2 | 44 | 0 | 1 | 9 | 1 | 45 | 57 | 2 | 1 | 13 | 2 | 5 | 17 | 58 | 16 |
| 15 | 1 | 34 | 1 | 44 | 1 | 1 | 10 | 1 | 45 | 59 | 0 | 1 | 15 | 1 | 5 | 18 | 59 | 15 |
| 16 | 1 | 33 | 2 | 45 | 1 | 1 | 11 | 1 | 45 | 59 | 1 | 1 | 16 | 1 | 5 | 18 | 0 | 14 |
| 17 | 1 | 31 | 1 | 46 | 1 | 1 | 12 | 2 | 45 | 56 | 1 | 1 | 17 | 2 | 5 | 18 | 1 | 13 |
| 18 | 1 | 30 | 2 | 47 | 0 | 1 | 14 | 1 | 45 | 57 | 2 | 1 | 19 | 1 | 5 | 18 | 2 | 12 |
| 19 | 1 | 28 | 2 | 47 | 1 | 1 | 15 | 2 | 45 | 55 | 5 | 1 | 20 | 1 | 5 | 18 | 3 | 11 |
| 20 | 1 | 26 | 2 | 48 | 0 | 1 | 17 | 2 | 45 | 51 | 5 | 1 | 21 | 2 | 5 | 18 | 3 | 10 |
| 21 | 1 | 24 | 1 | 48 | 1 | 1 | 19 | 2 | 45 | 46 | 7 | 1 | 23 | 1 | 5 | 18 | 4 | 9 |
| 22 | 1 | 23 | 2 | 49 | 0 | 1 | 21 | 2 | 45 | 39 | 8 | 1 | 24 | 1 | 5 | 18 | 5 | 8 |
| 23 | 1 | 21 | 2 | 49 | 1 | 1 | 23 | 2 | 45 | 31 | 10 | 1 | 25 | 2 | 5 | 18 | 5 | 7 |
| 24 | 1 | 19 | 2 | 50 | 0 | 1 | 24 | 1 | 45 | 21 | 12 | 1 | 27 | 1 | 5 | 18 | 6 | 6 |
| 25 | 1 | 17 | 2 | 50 | 1 | 1 | 26 | 2 | 45 | 9 | 14 | 1 | 28 | 2 | 5 | 18 | 7 | 5 |
| 26 | 1 | 15 | 2 | 51 | 0 | 1 | 28 | 2 | 44 | 55 | 16 | 1 | 30 | 2 | 5 | 18 | 7 | 4 |
| 27 | 1 | 13 | 2 | 51 | 1 | 1 | 29 | 1 | 44 | 39 | 18 | 1 | 32 | 2 | 5 | 18 | 8 | 3 |
| 28 | 1 | 11 | 2 | 52 | 0 | 1 | 31 | 2 | 44 | 21 | 20 | 1 | 34 | 2 | 5 | 18 | 9 | 2 |
| 29 | 1 | 9 | 2 | 52 | 1 | 1 | 32 | 1 | 44 | 1 | 22 | 1 | 36 | 2 | 5 | 18 | 9 | 1 |
| 30 | 1 | 7 | 2 | 53 | 1 | 1 | 33 | 2 | 43 | 39 | 24 | 1 | 38 | 2 | 5 | 18 | 10 | 0 |
| | adde | | | | | | | | minue | | | | | | | | | |

# Tabula equationum Veneris sexta :~

| | minue | | | | | | | | adde | | | | | | Statio | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 5 | 2 | 53 | 1 | 1 | 35 | 1 | 43 | 15 | 27 | 1 | 40 | 2 | 5 | 18 | 11 | 29 |
| 2 | 1 | 3 | 2 | 54 | 0 | 1 | 36 | 1 | 42 | 48 | 30 | 1 | 42 | 2 | 5 | 18 | 11 | 28 |
| 3 | 1 | 1 | 2 | 54 | 1 | 1 | 37 | 1 | 42 | 18 | 33 | 1 | 44 | 2 | 5 | 18 | 12 | 27 |
| 4 | 0 | 59 | 2 | 55 | 0 | 1 | 38 | 1 | 41 | 45 | 37 | 1 | 46 | 1 | 5 | 18 | 12 | 26 |
| 5 | 0 | 57 | 2 | 55 | 0 | 1 | 39 | 0 | 41 | 8 | 40 | 1 | 47 | 1 | 5 | 18 | 13 | 25 |
| 6 | 0 | 55 | 2 | 55 | 1 | 1 | 39 | 1 | 40 | 28 | 44 | 1 | 48 | 1 | 5 | 18 | 14 | 24 |
| 7 | 0 | 52 | 3 | 56 | 0 | 1 | 40 | 0 | 39 | 46 | 48 | 1 | 49 | 1 | 5 | 18 | 14 | 23 |
| 8 | 0 | 50 | 2 | 56 | 0 | 1 | 40 | 1 | 38 | 58 | 49 | 1 | 50 | 1 | 5 | 18 | 15 | 22 |
| 9 | 0 | 48 | 2 | 56 | 1 | 1 | 41 | 0 | 38 | 7 | [illegible] | 1 | 51 | 0 | 5 | 18 | 16 | 21 |
| 10 | 0 | 46 | 2 | 57 | 0 | 1 | 41 | 1 | 37 | 12 | 1.0 | 1 | 51 | 1 | 5 | 18 | 16 | 20 |
| 11 | 0 | 44 | 2 | 57 | 0 | 1 | 42 | 0 | 36 | 12 | 1.4 | 1 | 52 | 0 | 5 | 18 | 17 | 19 |
| 12 | 0 | 42 | 2 | 57 | 0 | 1 | 42 | 0 | 35 | 7 | 1.10 | 1 | 52 | 0 | 5 | 18 | 17 | 18 |
| 13 | 0 | 40 | 2 | 57 | 1 | 1 | 41 | 1 | 33 | 57 | 1.13 | 1 | 52 | 1 | 5 | 18 | 17 | 17 |
| 14 | 0 | 37 | 3 | 58 | 0 | 1 | 40 | 2 | 32 | 49 | 1.20 | 1 | 51 | 1 | 5 | 18 | 18 | 16 |
| 15 | 0 | 35 | 2 | 58 | 0 | 1 | 38 | 2 | 31 | 24 | 1.26 | 1 | 50 | 1 | 5 | 18 | 18 | 15 |
| 16 | 0 | 33 | 2 | 58 | 0 | 1 | 36 | 2 | 29 | 58 | 1.33 | 1 | 49 | 3 | 5 | 18 | 18 | 14 |
| 17 | 0 | 31 | 3 | 58 | 0 | 1 | 34 | 3 | 28 | 25 | 1.39 | 1 | 46 | 3 | 5 | 18 | 19 | 13 |
| 18 | 0 | 28 | 3 | 58 | 1 | 1 | 31 | 3 | 26 | 40 | 1.44 | 1 | 43 | 4 | 5 | 18 | 19 | 12 |
| 19 | 0 | 26 | 2 | 59 | 0 | 1 | 28 | 4 | 25 | 2 | 1.50 | 1 | 38 | 5 | 5 | 18 | 19 | 11 |
| 20 | 0 | 24 | 3 | 59 | 0 | 1 | 24 | 5 | 23 | 12 | 1.57 | 1 | 33 | 6 | 5 | 18 | 19 | 10 |
| 21 | 0 | 21 | 3 | 59 | 0 | 1 | 19 | 7 | 21 | 15 | 2.4 | 1 | 27 | 6 | 5 | 18 | 20 | 9 |
| 22 | 0 | 19 | 2 | 59 | 0 | 1 | 12 | 8 | 19 | 11 | 2.9 | 1 | 21 | 7 | 5 | 18 | 20 | 8 |
| 23 | 0 | 17 | 3 | 59 | 1 | 1 | 4 | 7 | 17 | 2 | 2.15 | 1 | 14 | 8 | 5 | 18 | 20 | 7 |
| 24 | 0 | 14 | 2 | 60 | 0 | 0 | 57 | 9 | 14 | 47 | 2.20 | 1 | 6 | 9 | 5 | 18 | 21 | 6 |
| 25 | 0 | 12 | 2 | 60 | 0 | 0 | 48 | 8 | 12 | 27 | 2.23 | 0 | 57 | 11 | 5 | 18 | 21 | 5 |
| 26 | 0 | 10 | 3 | 60 | 0 | 0 | 40 | 9 | 10 | 4 | 2.26 | 0 | 46 | 11 | 5 | 18 | 21 | 4 |
| 27 | 0 | 7 | 3 | 60 | 0 | 0 | 31 | 10 | 7 | 38 | 2.29 | 0 | 34 | 11 | 5 | 18 | 21 | 3 |
| 28 | 0 | 5 | 2 | 60 | 0 | 0 | 21 | 10 | 5 | 9 | 2.33 | 0 | 24 | 12 | 5 | 18 | 21 | 2 |
| 29 | 0 | 3 | 2 | 60 | 0 | 0 | 11 | 11 | 2 | 36 | 2.36 | 0 | 12 | 12 | 5 | 18 | 21 | 1 |
| 30 | 0 | 0 | 3 | 60 | 0 | 0 | 0 | 11 | 0 | 0 | | 0 | 0 | | 5 | 18 | 21 | 0 |
| | adde | | | | | | | | minue | | | | | | prima | | | |

A. 6.

# Tabula equationum Mercurii prima

.O.

| Gra. argumenti | Equatio centri | | Differentia | Prop. logis | Differentia | Longitudo longior | | Differentia | Equatio argumenti | | Differentia | Longitudo propior | | Differentia | Statio prima | | | Gra. argumenti |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Φ | | A | | 8 | | | A | A | | A | | | A | | | | |
| | G | m | m | m | m | G | m | m | G | m | m | G | m | m | S | G | m | |
| 1 | 0 | 3 | 3 | 60 | 0 | 0 | 2 | 2 | 0 | 17 | 17 | 0 | 1 | 1 | 4 | 27 | 16 | 29 |
| 2 | 0 | 6 | 3 | 60 | 0 | 0 | 4 | 2 | 0 | 33 | 16 | 0 | 2 | 1 | 4 | 27 | 14 | 28 |
| 3 | 0 | 9 | 3 | 60 | 0 | 0 | 5 | 1 | 0 | 49 | 16 | 0 | 3 | 1 | 4 | 27 | 14 | 27 |
| 4 | 0 | 12 | 3 | 59 | 1 | 0 | 7 | 2 | 1 | 5 | 17 | 0 | 4 | 1 | 4 | 27 | 13 | 26 |
| 5 | 0 | 15 | 2 | 59 | 0 | 0 | 9 | 2 | 1 | 22 | 16 | 0 | 4 | 0 | 4 | 27 | 13 | 25 |
| 6 | 0 | 17 | 3 | 59 | 0 | 0 | 10 | 1 | 1 | 38 | 17 | 0 | 5 | 1 | 4 | 27 | 12 | 24 |
| 7 | 0 | 20 | 3 | 58 | 1 | 0 | 12 | 2 | 1 | 55 | 16 | 0 | 6 | 1 | 4 | 27 | 12 | 23 |
| 8 | 0 | 23 | 3 | 58 | 0 | 0 | 14 | 2 | 2 | 11 | 16 | 0 | 7 | 1 | 4 | 27 | 11 | 22 |
| 9 | 0 | 25 | 2 | 58 | 0 | 0 | 15 | 1 | 2 | 27 | 17 | 0 | 8 | 1 | 4 | 27 | 11 | 21 |
| 10 | 0 | 28 | 3 | 57 | 1 | 0 | 17 | 2 | 2 | 44 | 16 | 0 | 9 | 1 | 4 | 27 | 9 | 20 |
| 11 | 0 | 30 | 3 | 57 | 0 | 0 | 19 | 1 | 3 | 0 | 16 | 0 | 10 | 1 | 4 | 27 | 9 | 19 |
| 12 | 0 | 33 | 2 | 57 | 0 | 0 | 20 | 2 | 3 | 16 | 16 | 0 | 11 | 1 | 4 | 27 | 8 | 18 |
| 13 | 0 | 35 | 3 | 56 | 1 | 0 | 22 | 1 | 3 | 32 | 16 | 0 | 12 | 1 | 4 | 27 | 7 | 17 |
| 14 | 0 | 38 | 2 | 56 | 0 | 0 | 23 | 1 | 3 | 48 | 17 | 0 | 13 | 1 | 4 | 27 | 6 | 16 |
| 15 | 0 | 40 | 3 | 55 | 1 | 0 | 24 | 2 | 4 | 5 | 16 | 0 | 14 | 1 | 4 | 27 | 5 | 15 |
| 16 | 0 | 43 | 2 | 55 | 0 | 0 | 26 | 2 | 4 | 21 | 16 | 0 | 15 | 1 | 4 | 27 | 3 | 14 |
| 17 | 0 | 45 | 3 | 54 | 1 | 0 | 28 | 1 | 4 | 37 | 16 | 0 | 16 | 1 | 4 | 27 | 2 | 13 |
| 18 | 0 | 48 | 2 | 54 | 0 | 0 | 29 | 2 | 4 | 53 | 16 | 0 | 17 | 1 | 4 | 27 | 0 | 12 |
| 19 | 0 | 50 | 2 | 53 | 1 | 0 | 31 | 2 | 5 | 9 | 16 | 0 | 18 | 1 | 4 | 26 | 59 | 11 |
| 20 | 0 | 53 | 3 | 53 | 0 | 0 | 33 | 1 | 5 | 25 | 16 | 0 | 16 | 1 | 4 | 26 | 56 | 10 |
| 21 | 0 | 55 | 2 | 52 | 1 | 0 | 34 | 2 | 5 | 41 | 16 | 0 | 20 | 1 | 4 | 26 | 54 | 9 |
| 22 | 0 | 58 | 3 | 51 | 1 | 0 | 36 | 2 | 5 | 57 | 16 | 0 | 21 | 1 | 4 | 26 | 52 | 8 |
| 23 | 1 | 0 | 2 | 51 | 0 | 0 | 38 | 1 | 6 | 13 | 16 | 0 | 22 | 1 | 4 | 26 | 50 | 7 |
| 24 | 1 | 2 | 2 | 50 | 1 | 0 | 39 | 2 | 6 | 29 | 16 | 0 | 23 | 1 | 4 | 26 | 48 | 6 |
| 25 | 1 | 5 | 3 | 49 | 1 | 0 | 41 | 2 | 6 | 45 | 16 | 0 | 24 | 0 | 4 | 26 | 46 | 5 |
| 26 | 1 | 8 | 3 | 48 | 1 | 0 | 43 | 1 | 7 | 1 | 16 | 0 | 24 | 1 | 4 | 26 | 44 | 4 |
| 27 | 1 | 10 | 2 | 47 | 1 | 0 | 44 | 2 | 7 | 17 | 16 | 0 | 25 | 1 | 4 | 26 | 42 | 3 |
| 28 | 1 | 13 | 3 | 46 | 1 | 0 | 46 | 2 | 7 | 33 | 16 | 0 | 26 | 1 | 4 | 26 | 40 | 2 |
| 29 | 1 | 15 | 2 | 45 | 1 | 0 | 48 | 1 | 7 | 49 | 15 | 0 | 27 | 1 | 4 | 26 | 38 | 1 |
| 30 | 1 | 17 | 2 | 44 | 1 | 0 | 49 | 2 | 8 | 4 | 16 | 0 | 28 | 1 | 4 | 26 | 36 | 0 |
| | adde | | Φ | | A | | | Φ | minue | | Φ | | | Φ | | | | |

# Tabula equationum Mercurii secunda

.ii. .l.

| Gra. argumenti | minue | | A | | Φ | | | A | adde | | A | | | A | Statio (b. a. c.) | | | Signa |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 20 | 3 | 43 | 1 | 0 | 51 | 2 | 8 | 20 | 16 | 0 | 29 | 1 | 26 | 4 | 34 | 29 |
| 2 | 1 | 23 | 3 | 42 | 1 | 0 | 53 | 2 | 8 | 35 | 15 | 0 | 30 | 1 | 26 | 4 | 32 | 28 |
| 3 | 1 | 25 | 2 | 41 | 1 | 0 | 54 | 1 | 8 | 50 | 15 | 0 | 31 | 1 | 26 | 4 | 29 | 27 |
| 4 | 1 | 28 | 3 | 40 | 1 | 0 | 56 | 2 | 9 | 6 | 16 | 0 | 32 | 1 | 26 | 4 | 27 | 26 |
| 5 | 1 | 30 | 2 | 39 | 1 | 0 | 58 | 2 | 9 | 21 | 15 | 0 | 33 | 1 | 26 | 4 | 24 | 25 |
| 6 | 1 | 33 | 3 | 38 | 2 | 0 | 59 | 1 | 9 | 36 | 15 | 0 | 34 | 1 | 26 | 4 | 21 | 24 |
| 7 | 1 | 36 | 3 | 36 | 1 | 1 | 1 | 2 | 9 | 51 | 15 | 0 | 35 | 1 | 26 | 4 | 19 | 23 |
| 8 | 1 | 38 | 2 | 35 | 1 | 1 | 2 | 1 | 10 | 6 | 15 | 0 | 36 | 1 | 26 | 4 | 17 | 22 |
| 9 | 1 | 40 | 2 | 34 | 1 | 1 | 4 | 2 | 10 | 21 | 15 | 0 | 37 | 1 | 26 | 4 | 15 | 21 |
| 10 | 1 | 43 | 3 | 33 | 1 | 1 | 5 | 1 | 10 | 36 | 15 | 0 | 38 | 1 | 26 | 4 | 12 | 20 |
| 11 | 1 | 45 | 2 | 32 | 1 | 1 | 7 | 2 | 10 | 51 | 15 | 0 | 39 | 1 | 26 | 4 | 9 | 19 |
| 12 | 1 | 47 | 2 | 31 | 2 | 1 | 8 | 1 | 11 | 6 | 15 | 0 | 40 | 1 | 26 | 4 | 6 | 18 |
| 13 | 1 | 50 | 3 | 29 | 1 | 1 | 10 | 2 | 11 | 21 | 15 | 0 | 41 | 1 | 26 | 4 | 4 | 17 |
| 14 | 1 | 52 | 2 | 28 | 1 | 1 | 12 | 2 | 11 | 36 | 15 | 0 | 42 | 1 | 26 | 4 | 1 | 16 |
| 15 | 1 | 54 | 3 | 27 | 2 | 1 | 13 | 1 | 11 | 50 | 14 | 0 | 43 | 1 | 25 | 4 | 58 | 15 |
| 16 | 1 | 57 | 2 | 25 | 1 | 1 | 15 | 2 | 12 | 5 | 15 | 0 | 44 | 1 | 25 | 4 | 56 | 14 |
| 17 | 1 | 59 | 2 | 24 | 1 | 1 | 16 | 1 | 12 | 19 | 14 | 0 | 45 | 1 | 25 | 4 | 53 | 13 |
| 18 | 2 | 1 | 3 | 23 | 2 | 1 | 18 | 2 | 12 | 34 | 15 | 0 | 46 | 0 | 25 | 4 | 50 | 12 |
| 19 | 2 | 4 | 2 | 21 | 1 | 1 | 20 | 2 | 12 | 48 | 14 | 0 | 46 | 1 | 25 | 4 | 48 | 11 |
| 20 | 2 | 6 | 2 | 20 | 1 | 1 | 22 | 1 | 13 | 2 | 14 | 0 | 47 | 1 | 25 | 4 | 45 | 10 |
| 21 | 2 | 8 | 2 | 19 | 2 | 1 | 23 | 2 | 13 | 16 | 14 | 0 | 48 | 1 | 25 | 4 | 42 | 9 |
| 22 | 2 | 10 | 2 | 17 | 1 | 1 | 25 | 2 | 13 | 30 | 14 | 0 | 49 | 1 | 25 | 4 | 40 | 8 |
| 23 | 2 | 12 | 2 | 16 | 1 | 1 | 27 | 1 | 13 | 44 | 14 | 0 | 49 | 0 | 25 | 4 | 37 | 7 |
| 24 | 2 | 14 | 2 | 15 | 2 | 1 | 28 | 2 | 13 | 58 | 14 | 0 | 50 | 1 | 25 | 4 | 34 | 6 |
| 25 | 2 | 16 | 2 | 13 | 1 | 1 | 30 | 2 | 14 | 12 | 14 | 0 | 51 | 1 | 25 | 4 | 30 | 5 |
| 26 | 2 | 18 | 1 | 12 | 1 | 1 | 32 | 2 | 14 | 26 | 14 | 0 | 52 | 1 | 25 | 4 | 27 | 4 |
| 27 | 2 | 19 | 2 | 11 | 2 | 1 | 34 | 2 | 14 | 39 | 13 | 0 | 53 | 1 | 25 | 4 | 24 | 3 |
| 28 | 2 | 21 | 2 | 9 | 1 | 1 | 36 | 2 | 14 | 52 | 13 | 0 | 54 | 1 | 25 | 4 | 22 | 2 |
| 29 | 2 | 23 | 2 | 8 | 1 | 1 | 38 | 1 | 15 | 5 | 13 | 0 | 55 | 1 | 25 | 4 | 20 | 1 |
| 30 | 2 | 25 | 1 | 7 | 1 | 1 | 39 | 2 | 15 | 18 | 13 | 0 | 56 | 1 | 25 | 4 | 18 | 0 |
| | adde | | Φ | | A | | | Φ | minue | | Φ | | | Φ | b. G | a. S | c. m | |

# Tabula equationum Mercurii Tertia :~

| Gra Argum | Equatio centri | | Dif | porcio | Dif | longitudo longior | | Dif | Equatio argumenti | | Dif | longitudo propior | | Dif | Statio prima | | | Gra Argum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | B | | A | | A | | | A | A | | A | | | A | | | | |
| | | | m | | m | | | m | | | m | | | m | S | G | M | |
| 1 | 2 | 27 | 2 | 5 | 1 | 1 | 41 | 2 | 15 | 30 | 13 | 0 | 47 | 1 | 4 | 25 | 16 | 29 |
| 2 | 2 | 29 | 2 | 4 | 2 | 1 | 43 | 2 | 15 | 44 | 12 | 0 | 58 | 2 | 4 | 25 | 14 | 28 |
| 3 | 2 | 31 | 2 | 2 | 1 | 1 | 44 | 1 | 15 | 56 | 13 | 1 | 0 | 1 | 4 | 25 | 11 | 27 |
| 4 | 2 | 33 | 1 | prior | 0 | 1 | 46 | 2 | 16 | 9 | 12 | 1 | 1 | 1 | 4 | 25 | 9 | 26 |
| 5 | 2 | 34 | 2 | 1 | 1 | 1 | 48 | 2 | 16 | 21 | 12 | 1 | 2 | 2 | 4 | 25 | 7 | 25 |
| 6 | 2 | 36 | 2 | 2 | 2 | 1 | 49 | 2 | 16 | 33 | 12 | 1 | 4 | 1 | 4 | 25 | 5 | 24 |
| 7 | 2 | 38 | 2 | 4 | 2 | 1 | 51 | 1 | 16 | 45 | 12 | 1 | 5 | 1 | 4 | 25 | 3 | 23 |
| 8 | 2 | 40 | 2 | 6 | 2 | 1 | 53 | 2 | 16 | 57 | 12 | 1 | 6 | 1 | 4 | 25 | 1 | 22 |
| 9 | 2 | 41 | 1 | 8 | 2 | 1 | 54 | 2 | 17 | 9 | 12 | 1 | 7 | 1 | 4 | 25 | 0 | 21 |
| 10 | 2 | 43 | 1 | 10 | 2 | 1 | 56 | 2 | 17 | 21 | 11 | 1 | 8 | 1 | 4 | 24 | 58 | 20 |
| 11 | 2 | 44 | 1 | 12 | 2 | 1 | 58 | 1 | 17 | 32 | 11 | 1 | 9 | 2 | 4 | 24 | 56 | 19 |
| 12 | 2 | 45 | 2 | 14 | 2 | 1 | 59 | 2 | 17 | 43 | 11 | 1 | 11 | 1 | 4 | 24 | 55 | 18 |
| 13 | 2 | 47 | 1 | 16 | 2 | 2 | 1 | 2 | 17 | 54 | 11 | 1 | 12 | 1 | 4 | 24 | 54 | 17 |
| 14 | 2 | 48 | 1 | 18 | 2 | 2 | 3 | 1 | 18 | 5 | 11 | 1 | 13 | 1 | 4 | 24 | 53 | 16 |
| 15 | 2 | 49 | 1 | 20 | 2 | 2 | 4 | 2 | 18 | 16 | 11 | 1 | 14 | 1 | 4 | 24 | 52 | 15 |
| 16 | 2 | 50 | 1 | 22 | 2 | 2 | 6 | 2 | 18 | 27 | 11 | 1 | 15 | 1 | 4 | 24 | 51 | 14 |
| 17 | 2 | 51 | 1 | 24 | 1 | 2 | 8 | 1 | 18 | 37 | 10 | 1 | 16 | 1 | 4 | 24 | 50 | 13 |
| 18 | 2 | 52 | 1 | 25 | 2 | 2 | 9 | 2 | 18 | 47 | 10 | 1 | 17 | 1 | 4 | 24 | 49 | 12 |
| 19 | 2 | 53 | 1 | 27 | 2 | 2 | 11 | 2 | 18 | 57 | 10 | 1 | 18 | 1 | 4 | 24 | 48 | 11 |
| 20 | 2 | 54 | 1 | 29 | 1 | 2 | 13 | 1 | 19 | 7 | 9 | 1 | 19 | 1 | 4 | 24 | 47 | 10 |
| 21 | 2 | 55 | 1 | 30 | 2 | 2 | 14 | 2 | 19 | 16 | 9 | 1 | 20 | 1 | 4 | 24 | 46 | 9 |
| 22 | 2 | 56 | 1 | 32 | 2 | 2 | 16 | 2 | 19 | 25 | 9 | 1 | 21 | 1 | 4 | 24 | 45 | 8 |
| 23 | 2 | 57 | 1 | 34 | 1 | 2 | 17 | 1 | 19 | 34 | 10 | 1 | 22 | 1 | 4 | 24 | 44 | 7 |
| 24 | 2 | 58 | 0 | 35 | 2 | 2 | 19 | 2 | 19 | 44 | 9 | 1 | 23 | 1 | 4 | 24 | 43 | 6 |
| 25 | 2 | 58 | 1 | 37 | 1 | 2 | 21 | 2 | 19 | 53 | 9 | 1 | 24 | 1 | 4 | 24 | 42 | 5 |
| 26 | 2 | 59 | 0 | 38 | 2 | 2 | 23 | 1 | 20 | 2 | 8 | 1 | 25 | 1 | 4 | 24 | 41 | 4 |
| 27 | 2 | 59 | 1 | 40 | 1 | 2 | 24 | 2 | 20 | 10 | 8 | 1 | 26 | 1 | 4 | 24 | 40 | 3 |
| 28 | 3 | 0 | 0 | 41 | 2 | 2 | 26 | 2 | 20 | 18 | 7 | 1 | 27 | 1 | 4 | 24 | 39 | 2 |
| 29 | 3 | 0 | 1 | 43 | 1 | 2 | 28 | 1 | 20 | 25 | 8 | 1 | 28 | 1 | 4 | 24 | 38 | 1 |
| 30 | 3 | 1 | 0 | 44 | 2 | 2 | 29 | 2 | 20 | 33 | 5 | 1 | 29 | 1 | 4 | 24 | 37 | 0 |
| | adde | | B | | A | | | B | minue | | B | | | B | | | | |

# Tabula equationum Mercurii Quarta :~

| Gra Argum | Equatio centri | | Dif | porcio | Dif | longitudo longior | | Dif | Equatio argumenti | | Dif | longitudo propior | | Dif | Statio prima | | | Gra Argum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | minue | | B | | A | | | A | adde | | B | | | A | | | | |
| 1 | 3 | 1 | 0 | 46 | 1 | 2 | 31 | 2 | 20 | 40 | 7 | 1 | 30 | 1 | 4 | 24 | 37 | 29 |
| 2 | 3 | 1 | 0 | 47 | 1 | 2 | 33 | 1 | 20 | 47 | 7 | 1 | 31 | 1 | 4 | 24 | 36 | 28 |
| 3 | 3 | 2 | 1 | 48 | 1 | 2 | 34 | 2 | 20 | 54 | 7 | 1 | 32 | 1 | 4 | 24 | 36 | 27 |
| 4 | 3 | 2 | 0 | 49 | 1 | 2 | 36 | 2 | 21 | 1 | 6 | 1 | 33 | 1 | 4 | 24 | 35 | 26 |
| 5 | 3 | 2 | 0 | 50 | 0 | 2 | 38 | 1 | 21 | 7 | 6 | 1 | 34 | 1 | 4 | 24 | 35 | 25 |
| 6 | 3 | 2 | 0 | 50 | 1 | 2 | 39 | 2 | 21 | 13 | 6 | 1 | 35 | 1 | 4 | 24 | 34 | 24 |
| 7 | 3 | 2 | 1 | 51 | 1 | 2 | 41 | 2 | 21 | 19 | 5 | 1 | 36 | 1 | 4 | 24 | 34 | 23 |
| 8 | 3 | 1 | 0 | 52 | 1 | 2 | 43 | 1 | 21 | 24 | 5 | 1 | 37 | 1 | 4 | 24 | 33 | 22 |
| 9 | 3 | 1 | 0 | 53 | 1 | 2 | 44 | 2 | 21 | 29 | 5 | 1 | 38 | 1 | 4 | 24 | 33 | 21 |
| 10 | 3 | 1 | 1 | 54 | 1 | 2 | 46 | 1 | 21 | 34 | 4 | 1 | 39 | 1 | 4 | 24 | 32 | 20 |
| 11 | 3 | 0 | 0 | 55 | 1 | 2 | 47 | 2 | 21 | 38 | 4 | 1 | 40 | 1 | 4 | 24 | 31 | 19 |
| 12 | 3 | 0 | 1 | 56 | 1 | 2 | 49 | 1 | 21 | 42 | 4 | 1 | 41 | 1 | 4 | 24 | 31 | 18 |
| 13 | 2 | 59 | 0 | 57 | • | 2 | 50 | 2 | 21 | 46 | 3 | 1 | 42 | 1 | 4 | 24 | 31 | 17 |
| 14 | 2 | 59 | 1 | 57 | • | 2 | 52 | 1 | 21 | 49 | 3 | 1 | 43 | 1 | 4 | 24 | 30 | 16 |
| 15 | 2 | 58 | 0 | 58 | 0 | 2 | 53 | 2 | 21 | 52 | 3 | 1 | 44 | 1 | 4 | 24 | 30 | 15 |
| 16 | 2 | 58 | 1 | 58 | 0 | 2 | 55 | 2 | 21 | 55 | 2 | 1 | 45 | 1 | 4 | 24 | 30 | 14 |
| 17 | 2 | 57 | 1 | 58 | 1 | 2 | 57 | 1 | 21 | 57 | 2 | 1 | 46 | 1 | 4 | 24 | 30 | 13 |
| 18 | 2 | 56 | 1 | 59 | 0 | 2 | 58 | 2 | 21 | 59 | 1 | 1 | 47 | 1 | 4 | 24 | 30 | 12 |
| 19 | 2 | 55 | 1 | 59 | 0 | 3 | 0 | 1 | 22 | 0 | 1 | 1 | 48 | 1 | 4 | 24 | 30 | 11 |
| 20 | 2 | 54 | 1 | 59 | 1 | 3 | 1 | 1 | 22 | 1 | 1 | 1 | 49 | 1 | 4 | 24 | 30 | 10 |
| 21 | 2 | 53 | 1 | 60 | 0 | 3 | 2 | 1 | 22 | 2 | 0 | 1 | 50 | 1 | 4 | 24 | 30 | 9 |
| 22 | 2 | 52 | 1 | 60 | 0 | 3 | 3 | 0 | 22 | 2 | 1 | 1 | 51 | 1 | 4 | 24 | 30 | 8 |
| 23 | 2 | 51 | 1 | 60 | 0 | 3 | 3 | 1 | 22 | 1 | 1 | 1 | 52 | 1 | 4 | 24 | 29 | 7 |
| 24 | 2 | 50 | 1 | 60 | 0 | 3 | 4 | 0 | 22 | 0 | 1 | 1 | 53 | 1 | 4 | 24 | 29 | 6 |
| 25 | 2 | 49 | 1 | 60 | 0 | 3 | 4 | 1 | 21 | 59 | 1 | 1 | 54 | 1 | 4 | 24 | 29 | 5 |
| 26 | 2 | 48 | 2 | 60 | 0 | 3 | 5 | 1 | 21 | 58 | 2 | 1 | 55 | 1 | 4 | 24 | 29 | 4 |
| 27 | 2 | 46 | • | 60 | 0 | 3 | 6 | 0 | 21 | 56 | 3 | 1 | 56 | 0 | 4 | 24 | 29 | 3 |
| 28 | 2 | 45 | 2 | 60 | 0 | 3 | 6 | 1 | 21 | 53 | 3 | 1 | 56 | 1 | 4 | 24 | 29 | 2 |
| 29 | 2 | 43 | 2 | 60 | 0 | 3 | 7 | 1 | 21 | 50 | 3 | 1 | 57 | 0 | 4 | 24 | 29 | 1 |
| 30 | 2 | 41 | 2 | 60 | 0 | 3 | 8 | 0 | 21 | 47 | 3 | 1 | 57 | 1 | 4 | 24 | 29 | 0 |
| | adde | | B A | | B | | | B | minue | | B A | | | B | | | | |

# Tabula equacionum Mercurij Quinta:~

| Sra signi | Equacio centri | | | Proporc. | | Longitudo longior | | | Equacio argumenti | | | Longitudo propior | | | Stacio prima | | | Sra signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | m | | m | | | m | | | m | | | m | s | g | m | |
| 1 | 2 | 39 | 2 | 60 | 0 | 3 | 8 | 1 | 21 | 43 | 4 | 1 | 58 | 1 | 4 | 24 | 29 | 29 |
| 2 | 2 | 37 | 2 | 60 | 0 | 3 | 9 | 0 | 21 | 38 | 5 | 1 | 58 | 0 | 4 | 24 | 29 | 28 |
| 3 | 2 | 35 | 1 | 60 | 0 | 3 | 9 | 0 | 21 | 33 | 5 | 1 | 58 | 0 | 4 | 24 | 29 | 27 |
| 4 | 2 | 34 | 2 | 59 | 1 | 3 | 9 | 1 | 21 | 27 | 6 | 1 | 59 | 1 | 4 | 24 | 29 | 26 |
| 5 | 2 | 32 | 2 | 59 | 0 | 3 | 10 | 0 | 21 | 21 | 6 | 1 | 59 | 0 | 4 | 24 | 29 | 25 |
| 6 | 2 | 30 | 2 | 59 | 0 | 3 | 10 | 1 | 21 | 15 | 6 | 1 | 59 | 0 | 4 | 24 | 29 | 24 |
| 7 | 2 | 28 | 2 | 59 | 0 | 3 | 11 | 0 | 21 | 8 | 7 | 2 | 0 | 1 | 4 | 24 | 29 | 23 |
| 8 | 2 | 26 | 2 | 58 | 1 | 3 | 11 | 1 | 21 | 1 | 7 | 2 | 0 | 0 | 4 | 24 | 29 | 22 |
| 9 | 2 | 24 | 2 | 58 | 0 | 3 | 12 | 0 | 20 | 53 | 8 | 2 | 0 | 0 | 4 | 24 | 30 | 21 |
| 10 | 2 | 22 | 2 | 58 | 0 | 3 | 12 | 0 | 20 | 44 | 9 | 2 | 0 | 0 | 4 | 24 | 30 | 20 |
| 11 | 2 | 20 | 2 | 57 | 1 | 3 | 12 | 1 | 20 | 35 | 9 | 2 | 1 | 0 | 4 | 24 | 30 | 19 |
| 12 | 2 | 18 | 2 | 57 | 0 | 3 | 11 | 0 | 20 | 25 | 10 | 2 | 1 | 0 | 4 | 24 | 30 | 18 |
| 13 | 2 | 16 | 2 | 57 | 1 | 3 | 11 | 1 | 20 | 14 | 11 | 2 | 1 | 0 | 4 | 24 | 30 | 17 |
| 14 | 2 | 14 | 3 | 56 | 0 | 3 | 10 | 1 | 20 | 2 | 12 | 2 | 1 | 0 | 4 | 24 | 30 | 16 |
| 15 | 2 | 11 | 2 | 56 | 0 | 3 | 9 | 1 | 19 | 50 | 12 | 2 | 1 | 0 | 4 | 24 | 31 | 15 |
| 16 | 2 | 9 | 2 | 56 | 1 | 3 | 8 | 1 | 19 | 37 | 13 | 2 | 1 | 0 | 4 | 24 | 31 | 14 |
| 17 | 2 | 7 | 3 | 55 | 0 | 3 | 7 | 1 | 19 | 24 | 13 | 2 | 0 | 0 | 4 | 24 | 31 | 13 |
| 18 | 2 | 4 | 2 | 55 | 1 | 3 | 6 | 1 | 19 | 10 | 14 | 2 | 0 | 0 | 4 | 24 | 32 | 12 |
| 19 | 2 | 2 | 2 | 54 | 0 | 3 | 5 | 1 | 18 | 55 | 15 | 2 | 0 | 0 | 4 | 24 | 32 | 11 |
| 20 | 2 | 0 | 3 | 54 | 1 | 3 | 4 | 2 | 18 | 40 | 15 | 2 | 0 | 0 | 4 | 24 | 32 | 10 |
| 21 | 1 | 57 | 2 | 53 | 0 | 3 | 2 | 1 | 18 | 24 | 16 | 2 | 0 | 0 | 4 | 24 | 33 | 9 |
| 22 | 1 | 55 | 3 | 53 | 1 | 3 | 1 | 2 | 18 | 7 | 17 | 1 | 59 | 1 | 4 | 24 | 33 | 8 |
| 23 | 1 | 52 | 3 | 52 | 0 | 2 | 59 | 2 | 17 | 50 | 17 | 1 | 59 | 0 | 4 | 24 | 33 | 7 |
| 24 | 1 | 49 | 2 | 52 | 1 | 2 | 57 | 2 | 17 | 32 | 18 | 1 | 58 | 1 | 4 | 24 | 34 | 6 |
| 25 | 1 | 47 | 3 | 51 | 0 | 2 | 55 | 2 | 17 | 14 | 18 | 1 | 57 | 1 | 4 | 24 | 34 | 5 |
| 26 | 1 | 44 | 3 | 51 | 1 | 2 | 53 | 2 | 16 | 55 | 19 | 1 | 55 | 2 | 4 | 24 | 35 | 4 |
| 27 | 1 | 41 | 3 | 50 | 1 | 2 | 51 | 3 | 16 | 35 | 20 | 1 | 53 | 2 | 4 | 24 | 35 | 3 |
| 28 | 1 | 38 | 3 | 49 | 0 | 2 | 48 | 3 | 16 | 14 | 21 | 1 | 51 | 2 | 4 | 24 | 35 | 2 |
| 29 | 1 | 35 | 3 | 49 | 1 | 2 | 45 | 3 | 15 | 53 | 21 | 1 | 49 | 2 | 4 | 24 | 35 | 1 |
| 30 | 1 | 32 | 2 | 48 | 0 | 2 | 42 | 3 | 15 | 31 | 22 | 1 | 47 | 2 | 4 | 24 | 36 | 0 |
| | adde | | a | | | | | A | Subtrahe | | a | | | A | | | | |

# Tabula equacionum Mercurij Sexta:~

| Sra signi | minue | | | Proporc. | | | | | adde | | | | | | | | | Sra signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 30 | 3 | 48 | 1 | 2 | 39 | 3 | 15 | 8 | 24 | 1 | 45 | 2 | 4 | 24 | 36 | 29 |
| 2 | 1 | 27 | 3 | 47 | 0 | 2 | 36 | 3 | 14 | 44 | 24 | 1 | 43 | 2 | 4 | 24 | 36 | 28 |
| 3 | 1 | 24 | 3 | 47 | 1 | 2 | 33 | 4 | 14 | 20 | 25 | 1 | 41 | 2 | 4 | 24 | 37 | 27 |
| 4 | 1 | 21 | 3 | 46 | 0 | 2 | 29 | 4 | 13 | 55 | 26 | 1 | 39 | 2 | 4 | 24 | 37 | 26 |
| 5 | 1 | 18 | 3 | 46 | 1 | 2 | 25 | 4 | 13 | 29 | 26 | 1 | 37 | 2 | 4 | 24 | 37 | 25 |
| 6 | 1 | 15 | 3 | 45 | 0 | 2 | 21 | 4 | 13 | 3 | 27 | 1 | 34 | 3 | 4 | 24 | 38 | 24 |
| 7 | 1 | 12 | 3 | 45 | 1 | 2 | 17 | 4 | 12 | 36 | 27 | 1 | 32 | 2 | 4 | 24 | 38 | 23 |
| 8 | 1 | 9 | 3 | 44 | 0 | 2 | 13 | 4 | 12 | 9 | 28 | 1 | 29 | 3 | 4 | 24 | 38 | 22 |
| 9 | 1 | 6 | 3 | 44 | 1 | 2 | 9 | 4 | 11 | 41 | 29 | 1 | 26 | 3 | 4 | 24 | 39 | 21 |
| 10 | 1 | 3 | 3 | 43 | 0 | 2 | 5 | 5 | 11 | 12 | 29 | 1 | 23 | 3 | 4 | 24 | 39 | 20 |
| 11 | 1 | 0 | 3 | 43 | 0 | 2 | 0 | 5 | 10 | 43 | 30 | 1 | 20 | 3 | 4 | 24 | 39 | 19 |
| 12 | 0 | 57 | 3 | 43 | 1 | 1 | 55 | 5 | 10 | 13 | 30 | 1 | 17 | 3 | 4 | 24 | 39 | 18 |
| 13 | 0 | 54 | 3 | 42 | 0 | 1 | 50 | 6 | 9 | 43 | 31 | 1 | 14 | 3 | | 24 | 39 | 17 |
| 14 | 0 | 51 | 3 | 42 | 0 | 1 | 44 | 6 | 9 | 12 | 32 | 1 | 11 | 3 | 4 | 24 | 39 | 16 |
| 15 | 0 | 48 | 3 | 42 | 0 | 1 | 38 | 6 | 8 | 40 | 33 | 1 | 7 | 3 | 4 | 24 | 40 | 15 |
| 16 | 0 | 45 | 3 | 42 | 1 | 1 | 32 | 6 | 8 | 7 | 33 | 1 | 4 | 4 | 4 | 24 | 40 | 14 |
| 17 | 0 | 42 | 3 | 41 | 0 | 1 | 26 | 7 | 7 | 34 | 33 | 1 | 0 | 3 | 4 | 24 | 40 | 13 |
| 18 | 0 | 39 | 4 | 41 | 0 | 1 | 19 | 6 | 7 | 1 | 34 | 0 | 56 | 4 | 4 | 24 | 40 | 12 |
| 19 | 0 | 35 | 3 | 41 | 0 | 1 | 13 | 6 | 6 | 27 | 34 | 0 | 52 | 4 | 4 | 24 | 40 | 11 |
| 20 | 0 | 32 | 4 | 41 | 0 | 1 | 7 | 6 | 5 | 53 | 34 | 0 | 47 | 5 | 4 | 24 | 40 | 10 |
| 21 | 0 | 28 | 3 | 41 | 0 | 1 | 1 | 6 | 5 | 19 | 35 | 0 | 43 | 4 | 4 | 24 | 40 | 9 |
| 22 | 0 | 25 | 3 | 41 | 1 | 0 | 55 | 7 | 4 | 44 | 35 | 0 | 38 | 5 | 4 | 24 | 41 | 8 |
| 23 | 0 | 22 | 3 | 40 | 0 | 0 | 48 | 6 | 4 | 9 | 34 | 0 | 33 | 5 | 4 | 24 | 41 | 7 |
| 24 | 0 | 19 | 3 | 40 | 0 | 0 | 42 | 7 | 3 | 35 | 35 | 0 | 28 | 5 | 4 | 24 | 41 | 6 |
| 25 | 0 | 16 | 3 | 40 | 0 | 0 | 35 | 7 | 3 | 0 | 35 | 0 | 24 | 4 | 4 | 24 | 41 | 5 |
| 26 | 0 | 13 | 4 | 40 | 0 | 0 | 28 | 7 | 2 | 24 | 36 | 0 | 19 | 5 | 4 | 24 | 41 | 4 |
| 27 | 0 | 9 | 3 | 40 | 0 | 0 | 21 | 7 | 1 | 48 | 36 | 0 | 14 | 5 | 4 | 24 | 41 | 3 |
| 28 | 0 | 6 | 3 | 40 | 0 | 0 | 14 | 7 | 1 | 12 | 36 | 0 | 10 | 4 | 4 | 24 | 41 | 2 |
| 29 | 0 | 3 | 3 | 40 | 0 | 0 | 7 | 7 | 0 | 36 | 36 | 0 | 5 | 5 | 4 | 24 | 42 | 1 |
| 30 | 0 | 0 | 3 | 40 | 0 | 0 | 0 | 7 | 0 | 0 | 36 | 0 | 0 | 5 | 4 | 24 | 42 | 0 |
| | adde | | A | | A | | | A | minue | | A | | | A | | | | |

# Incipit tabula ad inveniendum partes proporcionales

| | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | | 12 | | 13 | | 14 | | 15 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 | m | 2 |
| 1 | 0 | 1 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 5 | 0 | 6 | 0 | 7 | 0 | 8 | 0 | 9 | 0 | 10 | 0 | 11 | 0 | 12 | 0 | 13 | 0 | 14 | 0 | 15 |
| 2 | 0 | 2 | 0 | 4 | 0 | 6 | 0 | 8 | 0 | 10 | 0 | 12 | 0 | 14 | 0 | 16 | 0 | 18 | 0 | 20 | 0 | 22 | 0 | 24 | 0 | 26 | 0 | 28 | 0 | 30 |
| 3 | 0 | 3 | 0 | 6 | 0 | 9 | 0 | 12 | 0 | 15 | 0 | 18 | 0 | 21 | 0 | 24 | 0 | 27 | 0 | 30 | 0 | 33 | 0 | 36 | 0 | 39 | 0 | 42 | 0 | 45 |
| 4 | 0 | 4 | 0 | 8 | 0 | 12 | 0 | 16 | 0 | 20 | 0 | 24 | 0 | 28 | 0 | 32 | 0 | 36 | 0 | 40 | 0 | 44 | 0 | 48 | 0 | 52 | 0 | 56 | 1 | 0 |
| 5 | 0 | 5 | 0 | 10 | 0 | 15 | 0 | 20 | 0 | 25 | 0 | 30 | 0 | 35 | 0 | 40 | 0 | 45 | 0 | 50 | 0 | 55 | 1 | 0 | 1 | 5 | 1 | 10 | 1 | 15 |
| 6 | 0 | 6 | 0 | 12 | 0 | 18 | 0 | 24 | 0 | 30 | 0 | 36 | 0 | 42 | 0 | 48 | 0 | 54 | 1 | 0 | 1 | 6 | 1 | 12 | 1 | 18 | 1 | 24 | 1 | 30 |
| 7 | 0 | 7 | 0 | 14 | 0 | 21 | 0 | 28 | 0 | 35 | 0 | 42 | 0 | 49 | 0 | 56 | 1 | 3 | 1 | 10 | 1 | 17 | 1 | 24 | 1 | 31 | 1 | 38 | 1 | 45 |
| 8 | 0 | 8 | 0 | 16 | 0 | 24 | 0 | 32 | 0 | 40 | 0 | 48 | 0 | 56 | 1 | 4 | 1 | 12 | 1 | 20 | 1 | 28 | 1 | 36 | 1 | 44 | 1 | 52 | 2 | 0 |
| 9 | 0 | 9 | 0 | 18 | 0 | 27 | 0 | 36 | 0 | 45 | 0 | 54 | 1 | 3 | 1 | 12 | 1 | 21 | 1 | 30 | 1 | 39 | 1 | 48 | 1 | 57 | 2 | 6 | 2 | 15 |
| 10 | 0 | 10 | 0 | 20 | 0 | 30 | 0 | 40 | 0 | 50 | 1 | 0 | 1 | 10 | 1 | 20 | 1 | 30 | 1 | 40 | 1 | 50 | 2 | 0 | 2 | 10 | 2 | 20 | 2 | 30 |
| 11 | 0 | 11 | 0 | 22 | 0 | 33 | 0 | 44 | 0 | 55 | 1 | 6 | 1 | 17 | 1 | 28 | 1 | 39 | 1 | 50 | 2 | 1 | 2 | 12 | 2 | 23 | 2 | 34 | 2 | 45 |
| 12 | 0 | 12 | 0 | 24 | 0 | 36 | 0 | 48 | 1 | 0 | 1 | 12 | 1 | 24 | 1 | 36 | 1 | 48 | 2 | 0 | 2 | 12 | 2 | 24 | 2 | 36 | 2 | 48 | 3 | 0 |
| 13 | 0 | 13 | 0 | 26 | 0 | 39 | 0 | 52 | 1 | 5 | 1 | 18 | 1 | 31 | 1 | 44 | 1 | 57 | 2 | 10 | 2 | 23 | 2 | 36 | 2 | 49 | 3 | 2 | 3 | 15 |
| 14 | 0 | 14 | 0 | 28 | 0 | 42 | 0 | 56 | 1 | 10 | 1 | 24 | 1 | 38 | 1 | 52 | 2 | 6 | 2 | 20 | 2 | 34 | 2 | 48 | 3 | 2 | 3 | 16 | 3 | 30 |
| 15 | 0 | 15 | 0 | 30 | 0 | 45 | 1 | 0 | 1 | 15 | 1 | 30 | 1 | 45 | 2 | 0 | 2 | 15 | 2 | 30 | 2 | 45 | 3 | 0 | 3 | 15 | 3 | 30 | 3 | 45 |
| 16 | 0 | 16 | 0 | 32 | 0 | 48 | 1 | 4 | 1 | 20 | 1 | 36 | 1 | 52 | 2 | 8 | 2 | 24 | 2 | 40 | 2 | 56 | 3 | 12 | 3 | 28 | 3 | 44 | 4 | 0 |
| 17 | 0 | 17 | 0 | 34 | 0 | 51 | 1 | 8 | 1 | 25 | 1 | 42 | 1 | 59 | 2 | 16 | 2 | 33 | 2 | 50 | 3 | 7 | 3 | 24 | 3 | 41 | 3 | 58 | 4 | 15 |
| 18 | 0 | 18 | 0 | 36 | 0 | 54 | 1 | 12 | 1 | 30 | 1 | 48 | 2 | 6 | 2 | 24 | 2 | 42 | 3 | 0 | 3 | 18 | 3 | 36 | 3 | 54 | 4 | 12 | 4 | 30 |
| 19 | 0 | 19 | 0 | 38 | 0 | 57 | 1 | 16 | 1 | 35 | 1 | 54 | 2 | 13 | 2 | 32 | 2 | 51 | 3 | 10 | 3 | 29 | 3 | 48 | 4 | 7 | 4 | 26 | 4 | 45 |
| 20 | 0 | 20 | 0 | 40 | 1 | 0 | 1 | 20 | 1 | 40 | 2 | 0 | 2 | 20 | 2 | 40 | 3 | 0 | 3 | 20 | 3 | 40 | 4 | 0 | 4 | 20 | 4 | 40 | 5 | 0 |
| 21 | 0 | 21 | 0 | 42 | 1 | 3 | 1 | 24 | 1 | 45 | 2 | 6 | 2 | 27 | 2 | 48 | 3 | 9 | 3 | 30 | 3 | 51 | 4 | 12 | 4 | 33 | 4 | 54 | 5 | 15 |
| 22 | 0 | 22 | 0 | 44 | 1 | 6 | 1 | 28 | 1 | 50 | 2 | 12 | 2 | 34 | 2 | 56 | 3 | 18 | 3 | 40 | 4 | 2 | 4 | 24 | 4 | 46 | 5 | 8 | 5 | 30 |
| 23 | 0 | 23 | 0 | 46 | 1 | 9 | 1 | 32 | 1 | 55 | 2 | 18 | 2 | 41 | 3 | 4 | 3 | 27 | 3 | 50 | 4 | 13 | 4 | 36 | 4 | 59 | 5 | 22 | 5 | 45 |
| 24 | 0 | 24 | 0 | 48 | 1 | 12 | 1 | 36 | 2 | 0 | 2 | 24 | 2 | 48 | 3 | 12 | 3 | 36 | 4 | 0 | 4 | 24 | 4 | 48 | 5 | 12 | 5 | 36 | 6 | 0 |
| 25 | 0 | 25 | 0 | 50 | 1 | 15 | 1 | 40 | 2 | 5 | 2 | 30 | 2 | 55 | 3 | 20 | 3 | 45 | 4 | 10 | 4 | 35 | 5 | 0 | 5 | 25 | 5 | 50 | 6 | 15 |
| 26 | 0 | 26 | 0 | 52 | 1 | 18 | 1 | 44 | 2 | 10 | 2 | 36 | 3 | 2 | 3 | 28 | 3 | 54 | 4 | 20 | 4 | 46 | 5 | 12 | 5 | 38 | 6 | 4 | 6 | 30 |
| 27 | 0 | 27 | 0 | 54 | 1 | 21 | 1 | 48 | 2 | 15 | 2 | 42 | 3 | 9 | 3 | 36 | 4 | 3 | 4 | 30 | 4 | 57 | 5 | 24 | 5 | 51 | 6 | 18 | 6 | 45 |
| 28 | 0 | 28 | 0 | 56 | 1 | 24 | 1 | 52 | 2 | 20 | 2 | 48 | 3 | 16 | 3 | 44 | 4 | 12 | 4 | 40 | 5 | 8 | 5 | 36 | 6 | 4 | 6 | 32 | 7 | 0 |
| 29 | 0 | 29 | 0 | 58 | 1 | 27 | 1 | 56 | 2 | 25 | 2 | 54 | 3 | 23 | 3 | 52 | 4 | 21 | 4 | 50 | 5 | 19 | 5 | 48 | 6 | 17 | 6 | 46 | 7 | 15 |
| 30 | 0 | 30 | 1 | 0 | 1 | 30 | 2 | 0 | 2 | 30 | 3 | 0 | 3 | 30 | 4 | 0 | 4 | 30 | 5 | 0 | 5 | 30 | 6 | 0 | 6 | 30 | 7 | 0 | 7 | 30 |
| 31 | 0 | 31 | 1 | 2 | 1 | 33 | 2 | 4 | 2 | 35 | 3 | 6 | 3 | 37 | 4 | 8 | 4 | 39 | 5 | 10 | 5 | 41 | 6 | 12 | 6 | 43 | 7 | 14 | 7 | 45 |
| 32 | 0 | 32 | 1 | 4 | 1 | 36 | 2 | 8 | 2 | 40 | 3 | 12 | 3 | 44 | 4 | 16 | 4 | 48 | 5 | 20 | 5 | 52 | 6 | 24 | 6 | 56 | 7 | 28 | 8 | 0 |
| 33 | 0 | 33 | 1 | 6 | 1 | 39 | 2 | 12 | 2 | 45 | 3 | 18 | 3 | 51 | 4 | 24 | 4 | 57 | 5 | 30 | 6 | 3 | 6 | 36 | 7 | 9 | 7 | 42 | 8 | 15 |
| 34 | 0 | 34 | 1 | 8 | 1 | 42 | 2 | 16 | 2 | 50 | 3 | 24 | 3 | 58 | 4 | 32 | 5 | 6 | 5 | 40 | 6 | 14 | 6 | 48 | 7 | 22 | 7 | 56 | 8 | 30 |
| 35 | 0 | 35 | 1 | 10 | 1 | 45 | 2 | 20 | 2 | 55 | 3 | 30 | 4 | 5 | 4 | 40 | 5 | 15 | 5 | 50 | 6 | 25 | 7 | 0 | 7 | 35 | 8 | 10 | 8 | 45 |
| 36 | 0 | 36 | 1 | 12 | 1 | 48 | 2 | 24 | 3 | 0 | 3 | 36 | 4 | 12 | 4 | 48 | 5 | 24 | 6 | 0 | 6 | 36 | 7 | 12 | 7 | 48 | 8 | 24 | 9 | 0 |
| 37 | 0 | 37 | 1 | 14 | 1 | 51 | 2 | 28 | 3 | 5 | 3 | 42 | 4 | 19 | 4 | 56 | 5 | 33 | 6 | 10 | 6 | 47 | 7 | 24 | 8 | 1 | 8 | 38 | 9 | 15 |
| 38 | 0 | 38 | 1 | 16 | 1 | 54 | 2 | 32 | 3 | 10 | 3 | 48 | 4 | 26 | 5 | 4 | 5 | 42 | 6 | 20 | 6 | 58 | 7 | 36 | 8 | 14 | 8 | 52 | 9 | 30 |
| 39 | 0 | 39 | 1 | 18 | 1 | 57 | 2 | 36 | 3 | 15 | 3 | 54 | 4 | 33 | 5 | 12 | 5 | 51 | 6 | 30 | 7 | 9 | 7 | 48 | 8 | 27 | 9 | 6 | 9 | 45 |
| 40 | 0 | 40 | 1 | 20 | 2 | 0 | 2 | 40 | 3 | 20 | 4 | 0 | 4 | 40 | 5 | 20 | 6 | 0 | 6 | 40 | 7 | 20 | 8 | 0 | 8 | 40 | 9 | 20 | 10 | 0 |
| 41 | 0 | 41 | 1 | 22 | 2 | 3 | 2 | 44 | 3 | 25 | 4 | 6 | 4 | 47 | 5 | 28 | 6 | 9 | 6 | 50 | 7 | 31 | 8 | 12 | 8 | 53 | 9 | 34 | 10 | 15 |
| 42 | 0 | 42 | 1 | 24 | 2 | 6 | 2 | 48 | 3 | 30 | 4 | 12 | 4 | 54 | 5 | 36 | 6 | 18 | 7 | 0 | 7 | 42 | 8 | 24 | 9 | 6 | 9 | 48 | 10 | 30 |
| 43 | 0 | 43 | 1 | 26 | 2 | 9 | 2 | 52 | 3 | 35 | 4 | 18 | 5 | 1 | 5 | 44 | 6 | 27 | 7 | 10 | 7 | 53 | 8 | 36 | 9 | 19 | 10 | 2 | 10 | 45 |
| 44 | 0 | 44 | 1 | 28 | 2 | 12 | 2 | 56 | 3 | 40 | 4 | 24 | 5 | 8 | 5 | 52 | 6 | 36 | 7 | 20 | 8 | 4 | 8 | 48 | 9 | 32 | 10 | 16 | 11 | 0 |
| 45 | 0 | 45 | 1 | 30 | 2 | 15 | 3 | 0 | 3 | 45 | 4 | 30 | 5 | 15 | 6 | 0 | 6 | 45 | 7 | 30 | 8 | 15 | 9 | 0 | 9 | 45 | 10 | 30 | 11 | 15 |
| 46 | 0 | 46 | 1 | 32 | 2 | 18 | 3 | 4 | 3 | 50 | 4 | 36 | 5 | 22 | 6 | 8 | 6 | 54 | 7 | 40 | 8 | 26 | 9 | 12 | 9 | 58 | 10 | 44 | 11 | 30 |
| 47 | 0 | 47 | 1 | 34 | 2 | 21 | 3 | 8 | 3 | 55 | 4 | 42 | 5 | 29 | 6 | 16 | 7 | 3 | 7 | 50 | 8 | 37 | 9 | 24 | 10 | 11 | 10 | 58 | 11 | 45 |
| 48 | 0 | 48 | 1 | 36 | 2 | 24 | 3 | 12 | 4 | 0 | 4 | 48 | 5 | 36 | 6 | 24 | 7 | 12 | 8 | 0 | 8 | 48 | 9 | 36 | 10 | 24 | 11 | 12 | 12 | 0 |
| 49 | 0 | 49 | 1 | 38 | 2 | 27 | 3 | 16 | 4 | 5 | 4 | 54 | 5 | 43 | 6 | 32 | 7 | 21 | 8 | 10 | 8 | 59 | 9 | 48 | 10 | 37 | 11 | 26 | 12 | 15 |
| 50 | 0 | 50 | 1 | 40 | 2 | 30 | 3 | 20 | 4 | 10 | 5 | 0 | 5 | 50 | 6 | 40 | 7 | 30 | 8 | 20 | 9 | 10 | 10 | 0 | 10 | 50 | 11 | 40 | 12 | 30 |
| 51 | 0 | 51 | 1 | 42 | 2 | 33 | 3 | 24 | 4 | 15 | 5 | 6 | 5 | 57 | 6 | 48 | 7 | 39 | 8 | 30 | 9 | 21 | 10 | 12 | 11 | 3 | 11 | 54 | 12 | 45 |
| 52 | 0 | 52 | 1 | 44 | 2 | 36 | 3 | 28 | 4 | 20 | 5 | 12 | 6 | 4 | 6 | 56 | 7 | 48 | 8 | 40 | 9 | 32 | 10 | 24 | 11 | 16 | 12 | 8 | 13 | 0 |
| 53 | 0 | 53 | 1 | 46 | 2 | 39 | 3 | 32 | 4 | 25 | 5 | 18 | 6 | 11 | 7 | 4 | 7 | 57 | 8 | 50 | 9 | 43 | 10 | 36 | 11 | 29 | 12 | 22 | 13 | 15 |
| 54 | 0 | 54 | 1 | 48 | 2 | 42 | 3 | 36 | 4 | 30 | 5 | 24 | 6 | 18 | 7 | 12 | 8 | 6 | 9 | 0 | 9 | 54 | 10 | 48 | 11 | 42 | 12 | 36 | 13 | 30 |
| 55 | 0 | 55 | 1 | 50 | 2 | 45 | 3 | 40 | 4 | 35 | 5 | 30 | 6 | 25 | 7 | 20 | 8 | 15 | 9 | 10 | 10 | 5 | 11 | 0 | 11 | 55 | 12 | 50 | 13 | 45 |
| 56 | 0 | 56 | 1 | 52 | 2 | 48 | 3 | 44 | 4 | 40 | 5 | 36 | 6 | 32 | 7 | 28 | 8 | 24 | 9 | 20 | 10 | 16 | 11 | 12 | 12 | 8 | 13 | 4 | 14 | 0 |
| 57 | 0 | 57 | 1 | 54 | 2 | 51 | 3 | 48 | 4 | 45 | 5 | 42 | 6 | 39 | 7 | 36 | 8 | 33 | 9 | 30 | 10 | 27 | 11 | 24 | 12 | 21 | 13 | 18 | 14 | 15 |
| 58 | 0 | 58 | 1 | 56 | 2 | 54 | 3 | 52 | 4 | 50 | 5 | 48 | 6 | 46 | 7 | 44 | 8 | 42 | 9 | 40 | 10 | 38 | 11 | 36 | 12 | 34 | 13 | 32 | 14 | 30 |
| 59 | 0 | 59 | 1 | 58 | 2 | 57 | 3 | 56 | 4 | 55 | 5 | 54 | 6 | 53 | 7 | 52 | 8 | 51 | 9 | 50 | 10 | 49 | 11 | 48 | 12 | 47 | 13 | 46 | 14 | 45 |
| 60 | 1 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 5 | 0 | 6 | 0 | 7 | 0 | 8 | 0 | 9 | 0 | 10 | 0 | 11 | 0 | 12 | 0 | 13 | 0 | 14 | 0 | 15 | 0 |

# ab vno vsque adsexaginta:–

| | 16 | | 17 | | 18 | | 19 | | 20 | | 21 | | 22 | | 23 | | 24 | | 25 | | 26 | | 27 | | 28 | | 29 | | 30 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m |
| 1 | 0 | 16 | 0 | 17 | 0 | 18 | 0 | 19 | 0 | 20 | 0 | 21 | 0 | 22 | 0 | 23 | 0 | 24 | 0 | 25 | 0 | 26 | 0 | 27 | 0 | 28 | 0 | 29 | 0 | 30 |
| 2 | 0 | 32 | 0 | 34 | 0 | 36 | 0 | 38 | 0 | 40 | 0 | 42 | 0 | 44 | 0 | 46 | 0 | 48 | 0 | 50 | 0 | 52 | 0 | 54 | 0 | 56 | 0 | 58 | 1 | 0 |
| 3 | 0 | 48 | 0 | 51 | 0 | 54 | 0 | 57 | 1 | 0 | 1 | 3 | 1 | 6 | 1 | 9 | 1 | 12 | 1 | 15 | 1 | 18 | 1 | 21 | 1 | 24 | 1 | 27 | 1 | 30 |
| 4 | 1 | 4 | 1 | 8 | 1 | 12 | 1 | 16 | 1 | 20 | 1 | 24 | 1 | 28 | 1 | 32 | 1 | 36 | 1 | 40 | 1 | 44 | 1 | 48 | 1 | 52 | 1 | 56 | 2 | 0 |
| 5 | 1 | 20 | 1 | 25 | 1 | 30 | 1 | 35 | 1 | 40 | 1 | 45 | 1 | 50 | 1 | 55 | 2 | 0 | 2 | 5 | 2 | 10 | 2 | 15 | 2 | 20 | 2 | 25 | 2 | 30 |
| 6 | 1 | 36 | 1 | 42 | 1 | 48 | 1 | 54 | 2 | 0 | 2 | 6 | 2 | 12 | 2 | 18 | 2 | 24 | 2 | 30 | 2 | 36 | 2 | 42 | 2 | 48 | 2 | 54 | 3 | 0 |
| 7 | 1 | 52 | 1 | 59 | 2 | 6 | 2 | 13 | 2 | 20 | 2 | 27 | 2 | 34 | 2 | 41 | 2 | 48 | 2 | 55 | 3 | 2 | 3 | 9 | 3 | 16 | 3 | 23 | 3 | 30 |
| 8 | 2 | 8 | 2 | 16 | 2 | 24 | 2 | 32 | 2 | 40 | 2 | 48 | 2 | 56 | 3 | 4 | 3 | 12 | 3 | 20 | 3 | 28 | 3 | 36 | 3 | 44 | 3 | 52 | 4 | 0 |
| 9 | 2 | 24 | 2 | 33 | 2 | 42 | 2 | 51 | 3 | 0 | 3 | 9 | 3 | 18 | 3 | 27 | 3 | 36 | 3 | 45 | 3 | 54 | 4 | 3 | 4 | 12 | 4 | 21 | 4 | 30 |
| 10 | 2 | 40 | 2 | 50 | 3 | 0 | 3 | 10 | 3 | 20 | 3 | 30 | 3 | 40 | 3 | 50 | 4 | 0 | 4 | 10 | 4 | 20 | 4 | 30 | 4 | 40 | 4 | 50 | 5 | 0 |
| 11 | 2 | 56 | 3 | 7 | 3 | 18 | 3 | 29 | 3 | 40 | 3 | 51 | 4 | 2 | 4 | 13 | 4 | 24 | 4 | 35 | 4 | 46 | 4 | 57 | 5 | 8 | 5 | 19 | 5 | 30 |
| 12 | 3 | 12 | 3 | 24 | 3 | 36 | 3 | 48 | 4 | 0 | 4 | 12 | 4 | 24 | 4 | 36 | 4 | 48 | 5 | 0 | 5 | 12 | 5 | 24 | 5 | 36 | 5 | 48 | 6 | 0 |
| 13 | 3 | 28 | 3 | 41 | 3 | 54 | 4 | 7 | 4 | 20 | 4 | 33 | 4 | 46 | 4 | 59 | 5 | 12 | 5 | 25 | 5 | 38 | 5 | 51 | 6 | 4 | 6 | 17 | 6 | 30 |
| 14 | 3 | 44 | 3 | 58 | 4 | 12 | 4 | 26 | 4 | 40 | 4 | 54 | 5 | 8 | 5 | 22 | 5 | 36 | 5 | 50 | 6 | 4 | 6 | 18 | 6 | 32 | 6 | 46 | 7 | 0 |
| 15 | 4 | 0 | 4 | 15 | 4 | 30 | 4 | 45 | 5 | 0 | 5 | 15 | 5 | 30 | 5 | 45 | 6 | 0 | 6 | 15 | 6 | 30 | 6 | 45 | 7 | 0 | 7 | 15 | 7 | 30 |
| 16 | 4 | 16 | 4 | 32 | 4 | 48 | 5 | 4 | 5 | 20 | 5 | 36 | 5 | 52 | 6 | 8 | 6 | 24 | 6 | 40 | 6 | 56 | 7 | 12 | 7 | 28 | 7 | 44 | 8 | 0 |
| 17 | 4 | 32 | 4 | 49 | 5 | 6 | 5 | 23 | 5 | 40 | 5 | 57 | 6 | 14 | 6 | 31 | 6 | 48 | 7 | 5 | 7 | 22 | 7 | 39 | 7 | 56 | 8 | 13 | 8 | 30 |
| 18 | 4 | 48 | 5 | 6 | 5 | 24 | 5 | 42 | 6 | 0 | 6 | 18 | 6 | 36 | 6 | 54 | 7 | 12 | 7 | 30 | 7 | 48 | 8 | 6 | 8 | 24 | 8 | 42 | 9 | 0 |
| 19 | 5 | 4 | 5 | 23 | 5 | 42 | 6 | 1 | 6 | 20 | 6 | 39 | 6 | 58 | 7 | 17 | 7 | 36 | 7 | 55 | 8 | 14 | 8 | 33 | 8 | 52 | 9 | 11 | 9 | 30 |
| 20 | 5 | 20 | 5 | 40 | 6 | 0 | 6 | 20 | 6 | 40 | 7 | 0 | 7 | 20 | 7 | 40 | 8 | 0 | 8 | 20 | 8 | 40 | 9 | 0 | 9 | 20 | 9 | 40 | 10 | 0 |
| 21 | 5 | 36 | 5 | 57 | 6 | 18 | 6 | 39 | 7 | 0 | 7 | 21 | 7 | 42 | 8 | 3 | 8 | 24 | 8 | 45 | 9 | 6 | 9 | 27 | 9 | 48 | 10 | 9 | 10 | 30 |
| 22 | 5 | 52 | 6 | 14 | 6 | 36 | 6 | 58 | 7 | 20 | 7 | 42 | 8 | 4 | 8 | 26 | 8 | 48 | 9 | 10 | 9 | 32 | 9 | 54 | 10 | 16 | 10 | 38 | 11 | 0 |
| 23 | 6 | 8 | 6 | 31 | 6 | 54 | 7 | 17 | 7 | 40 | 8 | 3 | 8 | 26 | 8 | 49 | 9 | 12 | 9 | 35 | 9 | 58 | 10 | 21 | 10 | 44 | 11 | 7 | 11 | 30 |
| 24 | 6 | 24 | 6 | 48 | 7 | 12 | 7 | 36 | 8 | 0 | 8 | 24 | 8 | 48 | 9 | 12 | 9 | 36 | 10 | 0 | 10 | 24 | 10 | 48 | 11 | 12 | 11 | 36 | 12 | 0 |
| 25 | 6 | 40 | 7 | 5 | 7 | 30 | 7 | 55 | 8 | 20 | 8 | 45 | 9 | 10 | 9 | 35 | 10 | 0 | 10 | 25 | 10 | 50 | 11 | 15 | 11 | 40 | 12 | 5 | 12 | 30 |
| 26 | 6 | 56 | 7 | 22 | 7 | 48 | 8 | 14 | 8 | 40 | 9 | 6 | 9 | 32 | 9 | 58 | 10 | 24 | 10 | 50 | 11 | 16 | 11 | 42 | 12 | 8 | 12 | 34 | 13 | 0 |
| 27 | 7 | 12 | 7 | 39 | 8 | 6 | 8 | 33 | 9 | 0 | 9 | 27 | 9 | 54 | 10 | 21 | 10 | 48 | 11 | 15 | 11 | 42 | 12 | 9 | 12 | 36 | 13 | 3 | 13 | 30 |
| 28 | 7 | 28 | 7 | 56 | 8 | 24 | 8 | 52 | 9 | 20 | 9 | 48 | 10 | 16 | 10 | 44 | 11 | 12 | 11 | 40 | 12 | 8 | 12 | 36 | 13 | 4 | 13 | 32 | 14 | 0 |
| 29 | 7 | 44 | 8 | 13 | 8 | 42 | 9 | 11 | 9 | 40 | 10 | 9 | 10 | 38 | 11 | 7 | 11 | 36 | 12 | 5 | 12 | 34 | 13 | 3 | 13 | 32 | 14 | 1 | 14 | 30 |
| 30 | 8 | 0 | 8 | 30 | 9 | 0 | 9 | 30 | 10 | 0 | 10 | 30 | 11 | 0 | 11 | 30 | 12 | 0 | 12 | 30 | 13 | 0 | 13 | 30 | 14 | 0 | 14 | 30 | 15 | 0 |
| 31 | 8 | 16 | 8 | 47 | 9 | 18 | 9 | 49 | 10 | 20 | 10 | 51 | 11 | 22 | 11 | 53 | 12 | 24 | 12 | 55 | 13 | 26 | 13 | 57 | 14 | 28 | 14 | 59 | 15 | 30 |
| 32 | 8 | 32 | 9 | 4 | 9 | 36 | 10 | 8 | 10 | 40 | 11 | 12 | 11 | 44 | 12 | 16 | 12 | 48 | 13 | 20 | 13 | 52 | 14 | 24 | 14 | 56 | 15 | 28 | 16 | 0 |
| 33 | 8 | 48 | 9 | 21 | 9 | 54 | 10 | 27 | 11 | 0 | 11 | 33 | 12 | 6 | 12 | 39 | 13 | 12 | 13 | 45 | 14 | 18 | 14 | 51 | 15 | 24 | 15 | 57 | 16 | 30 |
| 34 | 9 | 4 | 9 | 38 | 10 | 12 | 10 | 46 | 11 | 20 | 11 | 54 | 12 | 28 | 13 | 2 | 13 | 36 | 14 | 10 | 14 | 44 | 15 | 18 | 15 | 52 | 16 | 26 | 17 | 0 |
| 35 | 9 | 20 | 9 | 55 | 10 | 30 | 11 | 5 | 11 | 40 | 12 | 15 | 12 | 50 | 13 | 25 | 14 | 0 | 14 | 35 | 15 | 10 | 15 | 45 | 16 | 20 | 16 | 55 | 17 | 30 |
| 36 | 9 | 36 | 10 | 12 | 10 | 48 | 11 | 24 | 12 | 0 | 12 | 36 | 13 | 12 | 13 | 48 | 14 | 24 | 15 | 0 | 15 | 36 | 16 | 12 | 16 | 48 | 17 | 24 | 18 | 0 |
| 37 | 9 | 52 | 10 | 29 | 11 | 6 | 11 | 43 | 12 | 20 | 12 | 57 | 13 | 34 | 14 | 11 | 14 | 48 | 15 | 25 | 16 | 2 | 16 | 39 | 17 | 16 | 17 | 53 | 18 | 30 |
| 38 | 10 | 8 | 10 | 46 | 11 | 24 | 12 | 2 | 12 | 40 | 13 | 18 | 13 | 56 | 14 | 34 | 15 | 12 | 15 | 50 | 16 | 28 | 17 | 6 | 17 | 44 | 18 | 22 | 19 | 0 |
| 39 | 10 | 24 | 11 | 3 | 11 | 42 | 12 | 21 | 13 | 0 | 13 | 39 | 14 | 18 | 14 | 57 | 15 | 36 | 16 | 15 | 16 | 54 | 17 | 33 | 18 | 12 | 18 | 51 | 19 | 30 |
| 40 | 10 | 40 | 11 | 20 | 12 | 0 | 12 | 40 | 13 | 20 | 14 | 0 | 14 | 40 | 15 | 20 | 16 | 0 | 16 | 40 | 17 | 20 | 18 | 0 | 18 | 40 | 19 | 20 | 20 | 0 |
| 41 | 10 | 56 | 11 | 37 | 12 | 18 | 12 | 59 | 13 | 40 | 14 | 21 | 15 | 2 | 15 | 43 | 16 | 24 | 17 | 5 | 17 | 46 | 18 | 27 | 19 | 8 | 19 | 49 | 20 | 30 |
| 42 | 11 | 12 | 11 | 54 | 12 | 36 | 13 | 18 | 14 | 0 | 14 | 42 | 15 | 24 | 16 | 6 | 16 | 48 | 17 | 30 | 18 | 12 | 18 | 54 | 19 | 36 | 20 | 18 | 21 | 0 |
| 43 | 11 | 28 | 12 | 11 | 12 | 54 | 13 | 37 | 14 | 20 | 15 | 3 | 15 | 46 | 16 | 29 | 17 | 12 | 17 | 55 | 18 | 38 | 19 | 21 | 20 | 4 | 20 | 47 | 21 | 30 |
| 44 | 11 | 44 | 12 | 28 | 13 | 12 | 13 | 56 | 14 | 40 | 15 | 24 | 16 | 8 | 16 | 52 | 17 | 36 | 18 | 20 | 19 | 4 | 19 | 48 | 20 | 32 | 21 | 16 | 22 | 0 |
| 45 | 12 | 0 | 12 | 45 | 13 | 30 | 14 | 15 | 15 | 0 | 15 | 45 | 16 | 30 | 17 | 15 | 18 | 0 | 18 | 45 | 19 | 30 | 20 | 15 | 21 | 0 | 21 | 45 | 22 | 30 |
| 46 | 12 | 16 | 13 | 2 | 13 | 48 | 14 | 34 | 15 | 20 | 16 | 6 | 16 | 52 | 17 | 38 | 18 | 24 | 19 | 10 | 19 | 56 | 20 | 42 | 21 | 28 | 22 | 14 | 23 | 0 |
| 47 | 12 | 32 | 13 | 19 | 14 | 6 | 14 | 53 | 15 | 40 | 16 | 27 | 17 | 14 | 18 | 1 | 18 | 48 | 19 | 35 | 20 | 22 | 21 | 9 | 21 | 56 | 22 | 43 | 23 | 30 |
| 48 | 12 | 48 | 13 | 36 | 14 | 24 | 15 | 12 | 16 | 0 | 16 | 48 | 17 | 36 | 18 | 24 | 19 | 12 | 20 | 0 | 20 | 48 | 21 | 36 | 22 | 24 | 23 | 12 | 24 | 0 |
| 49 | 13 | 4 | 13 | 53 | 14 | 42 | 15 | 31 | 16 | 20 | 17 | 9 | 17 | 58 | 18 | 47 | 19 | 36 | 20 | 25 | 21 | 14 | 22 | 3 | 22 | 52 | 23 | 41 | 24 | 30 |
| 50 | 13 | 20 | 14 | 10 | 15 | 0 | 15 | 50 | 16 | 40 | 17 | 30 | 18 | 20 | 19 | 10 | 20 | 0 | 20 | 50 | 21 | 40 | 22 | 30 | 23 | 20 | 24 | 10 | 25 | 0 |
| 51 | 13 | 36 | 14 | 27 | 15 | 18 | 16 | 9 | 17 | 0 | 17 | 51 | 18 | 42 | 19 | 33 | 20 | 24 | 21 | 15 | 22 | 6 | 22 | 57 | 23 | 48 | 24 | 39 | 25 | 30 |
| 52 | 13 | 52 | 14 | 44 | 15 | 36 | 16 | 28 | 17 | 20 | 18 | 12 | 19 | 4 | 19 | 56 | 20 | 48 | 21 | 40 | 22 | 32 | 23 | 24 | 24 | 16 | 25 | 8 | 26 | 0 |
| 53 | 14 | 8 | 15 | 1 | 15 | 54 | 16 | 47 | 17 | 40 | 18 | 33 | 19 | 26 | 20 | 19 | 21 | 12 | 22 | 5 | 22 | 58 | 23 | 51 | 24 | 44 | 25 | 37 | 26 | 30 |
| 54 | 14 | 24 | 15 | 18 | 16 | 12 | 17 | 6 | 18 | 0 | 18 | 54 | 19 | 48 | 20 | 42 | 21 | 36 | 22 | 30 | 23 | 24 | 24 | 18 | 25 | 12 | 26 | 6 | 27 | 0 |
| 55 | 14 | 40 | 15 | 35 | 16 | 30 | 17 | 25 | 18 | 20 | 19 | 15 | 20 | 10 | 21 | 5 | 22 | 0 | 22 | 55 | 23 | 50 | 24 | 45 | 25 | 40 | 26 | 35 | 27 | 30 |
| 56 | 14 | 56 | 15 | 52 | 16 | 48 | 17 | 44 | 18 | 40 | 19 | 36 | 20 | 32 | 21 | 28 | 22 | 24 | 23 | 20 | 24 | 16 | 25 | 12 | 26 | 8 | 27 | 4 | 28 | 0 |
| 57 | 15 | 12 | 16 | 9 | 17 | 6 | 18 | 3 | 19 | 0 | 19 | 57 | 20 | 54 | 21 | 51 | 22 | 48 | 23 | 45 | 24 | 42 | 25 | 39 | 26 | 36 | 27 | 33 | 28 | 30 |
| 58 | 15 | 28 | 16 | 26 | 17 | 24 | 18 | 22 | 19 | 20 | 20 | 18 | 21 | 16 | 22 | 14 | 23 | 12 | 24 | 10 | 25 | 8 | 26 | 6 | 27 | 4 | 28 | 2 | 29 | 0 |
| 59 | 15 | 44 | 16 | 43 | 17 | 42 | 18 | 41 | 19 | 40 | 20 | 39 | 21 | 38 | 22 | 37 | 23 | 36 | 24 | 35 | 25 | 34 | 26 | 33 | 27 | 32 | 28 | 31 | 29 | 30 |
| 60 | 16 | 0 | 17 | 0 | 18 | 0 | 19 | 0 | 20 | 0 | 21 | 0 | 22 | 0 | 23 | 0 | 24 | 0 | 25 | 0 | 26 | 0 | 27 | 0 | 28 | 0 | 29 | 0 | 30 | 0 |

# Secunda pars tabule ad inveniendum partem proporcio

| | 31 | | 32 | | 33 | | 34 | | 35 | | 36 | | 37 | | 38 | | 39 | | 40 | | 41 | | 42 | | 43 | | 44 | | 45 | |
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| | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m | ȝ | m |
| 1 | 0 | 31 | 0 | 32 | 0 | 33 | 0 | 34 | 0 | 35 | 0 | 36 | 0 | 37 | 0 | 38 | 0 | 39 | 0 | 40 | 0 | 41 | 0 | 42 | 0 | 43 | 0 | 44 | 0 | 45 |
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| 3 | 1 | 33 | 1 | 36 | 1 | 39 | 1 | 42 | 1 | 45 | 1 | 48 | 1 | 51 | 1 | 54 | 1 | 57 | 2 | 0 | 2 | 3 | 2 | 6 | 2 | 9 | 2 | 12 | 2 | 15 |
| 4 | 2 | 4 | 2 | 8 | 2 | 12 | 2 | 16 | 2 | 20 | 2 | 24 | 2 | 28 | 2 | 32 | 2 | 36 | 2 | 40 | 2 | 44 | 2 | 48 | 2 | 52 | 2 | 56 | 3 | 0 |
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| 6 | 3 | 6 | 3 | 12 | 3 | 18 | 3 | 24 | 3 | 30 | 3 | 36 | 3 | 42 | 3 | 48 | 3 | 54 | 4 | 0 | 4 | 6 | 4 | 12 | 4 | 18 | 4 | 24 | 4 | 30 |
| 7 | 3 | 37 | 3 | 44 | 3 | 51 | 3 | 58 | 4 | 5 | 4 | 12 | 4 | 19 | 4 | 26 | 4 | 33 | 4 | 40 | 4 | 47 | 4 | 54 | 5 | 1 | 5 | 8 | 5 | 15 |
| 8 | 4 | 8 | 4 | 16 | 4 | 24 | 4 | 32 | 4 | 40 | 4 | 48 | 4 | 56 | 5 | 4 | 5 | 12 | 5 | 20 | 5 | 28 | 5 | 36 | 5 | 44 | 5 | 52 | 6 | 0 |
| 9 | 4 | 39 | 4 | 48 | 4 | 57 | 5 | 6 | 5 | 15 | 5 | 24 | 5 | 33 | 5 | 42 | 5 | 51 | 6 | 0 | 6 | 9 | 6 | 18 | 6 | 27 | 6 | 36 | 6 | 45 |
| 10 | 5 | 10 | 5 | 20 | 5 | 30 | 5 | 40 | 5 | 50 | 6 | 0 | 6 | 10 | 6 | 20 | 6 | 30 | 6 | 40 | 6 | 50 | 7 | 0 | 7 | 10 | 7 | 20 | 7 | 30 |
| 11 | 5 | 41 | 5 | 52 | 6 | 3 | 6 | 14 | 6 | 25 | 6 | 36 | 6 | 47 | 6 | 58 | 7 | 9 | 7 | 20 | 7 | 31 | 7 | 42 | 7 | 53 | 8 | 4 | 8 | 15 |
| 12 | 6 | 12 | 6 | 24 | 6 | 36 | 6 | 48 | 7 | 0 | 7 | 12 | 7 | 24 | 7 | 36 | 7 | 48 | 8 | 0 | 8 | 12 | 8 | 24 | 8 | 36 | 8 | 48 | 9 | 0 |
| 13 | 6 | 43 | 6 | 56 | 7 | 9 | 7 | 22 | 7 | 35 | 7 | 48 | 8 | 1 | 8 | 14 | 8 | 27 | 8 | 40 | 8 | 53 | 9 | 6 | 9 | 19 | 9 | 32 | 9 | 45 |
| 14 | 7 | 14 | 7 | 28 | 7 | 42 | 7 | 56 | 8 | 10 | 8 | 24 | 8 | 38 | 8 | 52 | 9 | 6 | 9 | 20 | 9 | 34 | 9 | 48 | 10 | 2 | 10 | 16 | 10 | 30 |
| 15 | 7 | 45 | 8 | 0 | 8 | 15 | 8 | 30 | 8 | 45 | 9 | 0 | 9 | 15 | 9 | 30 | 9 | 45 | 10 | 0 | 10 | 15 | 10 | 30 | 10 | 45 | 11 | 0 | 11 | 15 |
| 16 | 8 | 16 | 8 | 32 | 8 | 48 | 9 | 4 | 9 | 20 | 9 | 36 | 9 | 52 | 10 | 8 | 10 | 24 | 10 | 40 | 10 | 56 | 11 | 12 | 11 | 28 | 11 | 44 | 12 | 0 |
| 17 | 8 | 47 | 9 | 4 | 9 | 21 | 9 | 38 | 9 | 55 | 10 | 12 | 10 | 29 | 10 | 46 | 11 | 3 | 11 | 20 | 11 | 37 | 11 | 54 | 12 | 11 | 12 | 28 | 12 | 45 |
| 18 | 9 | 18 | 9 | 36 | 9 | 54 | 10 | 12 | 10 | 30 | 10 | 48 | 11 | 6 | 11 | 24 | 11 | 42 | 12 | 0 | 12 | 18 | 12 | 36 | 12 | 54 | 13 | 12 | 13 | 30 |
| 19 | 9 | 49 | 10 | 8 | 10 | 27 | 10 | 46 | 11 | 5 | 11 | 24 | 11 | 43 | 12 | 2 | 12 | 21 | 12 | 40 | 12 | 59 | 13 | 18 | 13 | 37 | 13 | 56 | 14 | 15 |
| 20 | 10 | 20 | 10 | 40 | 11 | 0 | 11 | 20 | 11 | 40 | 12 | 0 | 12 | 20 | 12 | 40 | 13 | 0 | 13 | 20 | 13 | 40 | 14 | 0 | 14 | 20 | 14 | 40 | 15 | 0 |
| 21 | 10 | 51 | 11 | 12 | 11 | 33 | 11 | 54 | 12 | 15 | 12 | 36 | 12 | 57 | 13 | 18 | 13 | 39 | 14 | 0 | 14 | 21 | 14 | 42 | 15 | 3 | 15 | 24 | 15 | 45 |
| 22 | 11 | 22 | 11 | 44 | 12 | 6 | 12 | 28 | 12 | 50 | 13 | 12 | 13 | 34 | 13 | 56 | 14 | 18 | 14 | 40 | 15 | 2 | 15 | 24 | 15 | 46 | 16 | 8 | 16 | 30 |
| 23 | 11 | 53 | 12 | 16 | 12 | 39 | 13 | 2 | 13 | 25 | 13 | 48 | 14 | 11 | 14 | 34 | 14 | 57 | 15 | 20 | 15 | 43 | 16 | 6 | 16 | 29 | 16 | 52 | 17 | 15 |
| 24 | 12 | 24 | 12 | 48 | 13 | 12 | 13 | 36 | 14 | 0 | 14 | 24 | 14 | 48 | 15 | 12 | 15 | 36 | 16 | 0 | 16 | 24 | 16 | 48 | 17 | 12 | 17 | 36 | 18 | 0 |
| 25 | 12 | 55 | 13 | 20 | 13 | 45 | 14 | 10 | 14 | 35 | 15 | 0 | 15 | 25 | 15 | 50 | 16 | 15 | 16 | 40 | 17 | 5 | 17 | 30 | 17 | 55 | 18 | 20 | 18 | 45 |
| 26 | 13 | 26 | 13 | 52 | 14 | 18 | 14 | 44 | 15 | 10 | 15 | 36 | 16 | 2 | 16 | 28 | 16 | 54 | 17 | 20 | 17 | 46 | 18 | 12 | 18 | 38 | 19 | 4 | 19 | 30 |
| 27 | 13 | 57 | 14 | 24 | 14 | 51 | 15 | 18 | 15 | 45 | 16 | 12 | 16 | 39 | 17 | 6 | 17 | 33 | 18 | 0 | 18 | 27 | 18 | 54 | 19 | 21 | 19 | 48 | 20 | 15 |
| 28 | 14 | 28 | 14 | 56 | 15 | 24 | 15 | 52 | 16 | 20 | 16 | 48 | 17 | 16 | 17 | 44 | 18 | 12 | 18 | 40 | 19 | 8 | 19 | 36 | 20 | 4 | 20 | 32 | 21 | 0 |
| 29 | 14 | 59 | 15 | 28 | 15 | 57 | 16 | 26 | 16 | 55 | 17 | 24 | 17 | 53 | 18 | 22 | 18 | 51 | 19 | 20 | 19 | 49 | 20 | 18 | 20 | 47 | 21 | 16 | 21 | 45 |
| 30 | 15 | 30 | 16 | 0 | 16 | 30 | 17 | 0 | 17 | 30 | 18 | 0 | 18 | 30 | 19 | 0 | 19 | 30 | 20 | 0 | 20 | 30 | 21 | 0 | 21 | 30 | 22 | 0 | 22 | 30 |
| 31 | 16 | 1 | 16 | 32 | 17 | 3 | 17 | 34 | 18 | 5 | 18 | 36 | 19 | 7 | 19 | 38 | 20 | 9 | 20 | 40 | 21 | 11 | 21 | 42 | 22 | 13 | 22 | 44 | 23 | 15 |
| 32 | 16 | 32 | 17 | 4 | 17 | 36 | 18 | 8 | 18 | 40 | 19 | 12 | 19 | 44 | 20 | 16 | 20 | 48 | 21 | 20 | 21 | 52 | 22 | 24 | 22 | 56 | 23 | 28 | 24 | 0 |
| 33 | 17 | 3 | 17 | 36 | 18 | 9 | 18 | 42 | 19 | 15 | 19 | 48 | 20 | 21 | 20 | 54 | 21 | 27 | 22 | 0 | 22 | 33 | 23 | 6 | 23 | 39 | 24 | 12 | 24 | 45 |
| 34 | 17 | 34 | 18 | 8 | 18 | 42 | 19 | 16 | 19 | 50 | 20 | 24 | 20 | 58 | 21 | 32 | 22 | 6 | 22 | 40 | 23 | 14 | 23 | 48 | 24 | 22 | 24 | 56 | 25 | 30 |
| 35 | 18 | 5 | 18 | 40 | 19 | 15 | 19 | 50 | 20 | 25 | 21 | 0 | 21 | 35 | 22 | 10 | 22 | 45 | 23 | 20 | 23 | 55 | 24 | 30 | 25 | 5 | 25 | 40 | 26 | 15 |
| 36 | 18 | 36 | 19 | 12 | 19 | 48 | 20 | 24 | 21 | 0 | 21 | 36 | 22 | 12 | 22 | 48 | 23 | 24 | 24 | 0 | 24 | 36 | 25 | 12 | 25 | 48 | 26 | 24 | 27 | 0 |
| 37 | 19 | 7 | 19 | 44 | 20 | 21 | 20 | 58 | 21 | 35 | 22 | 12 | 22 | 49 | 23 | 26 | 24 | 3 | 24 | 40 | 25 | 17 | 25 | 54 | 26 | 31 | 27 | 8 | 27 | 45 |
| 38 | 19 | 38 | 20 | 16 | 20 | 54 | 21 | 32 | 22 | 10 | 22 | 48 | 23 | 26 | 24 | 4 | 24 | 42 | 25 | 20 | 25 | 58 | 26 | 36 | 27 | 14 | 27 | 52 | 28 | 30 |
| 39 | 20 | 9 | 20 | 48 | 21 | 27 | 22 | 6 | 22 | 45 | 23 | 24 | 24 | 3 | 24 | 42 | 25 | 21 | 26 | 0 | 26 | 39 | 27 | 18 | 27 | 57 | 28 | 36 | 29 | 15 |
| 40 | 20 | 40 | 21 | 20 | 22 | 0 | 22 | 40 | 23 | 20 | 24 | 0 | 24 | 40 | 25 | 20 | 26 | 0 | 26 | 40 | 27 | 20 | 28 | 0 | 28 | 40 | 29 | 20 | 30 | 0 |
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| 42 | 21 | 42 | 22 | 24 | 23 | 6 | 23 | 48 | 24 | 30 | 25 | 12 | 25 | 54 | 26 | 36 | 27 | 18 | 28 | 0 | 28 | 42 | 29 | 24 | 30 | 6 | 30 | 48 | 31 | 30 |
| 43 | 22 | 13 | 22 | 56 | 23 | 39 | 24 | 22 | 25 | 5 | 25 | 48 | 26 | 31 | 27 | 14 | 27 | 57 | 28 | 40 | 29 | 23 | 30 | 6 | 30 | 49 | 31 | 32 | 32 | 15 |
| 44 | 22 | 44 | 23 | 28 | 24 | 12 | 24 | 56 | 25 | 40 | 26 | 24 | 27 | 8 | 27 | 52 | 28 | 36 | 29 | 20 | 30 | 4 | 30 | 48 | 31 | 32 | 32 | 16 | 33 | 0 |
| 45 | 23 | 15 | 24 | 0 | 24 | 45 | 25 | 30 | 26 | 15 | 27 | 0 | 27 | 45 | 28 | 30 | 29 | 15 | 30 | 0 | 30 | 45 | 31 | 30 | 32 | 15 | 33 | 0 | 33 | 45 |
| 46 | 23 | 46 | 24 | 32 | 25 | 18 | 26 | 4 | 26 | 50 | 27 | 36 | 28 | 22 | 29 | 8 | 29 | 54 | 30 | 40 | 31 | 26 | 32 | 12 | 32 | 58 | 33 | 44 | 34 | 30 |
| 47 | 24 | 17 | 25 | 4 | 25 | 51 | 26 | 38 | 27 | 25 | 28 | 12 | 28 | 59 | 29 | 46 | 30 | 33 | 31 | 20 | 32 | 7 | 32 | 54 | 33 | 41 | 34 | 28 | 35 | 15 |
| 48 | 24 | 48 | 25 | 36 | 26 | 24 | 27 | 12 | 28 | 0 | 28 | 48 | 29 | 36 | 30 | 24 | 31 | 12 | 32 | 0 | 32 | 48 | 33 | 36 | 34 | 24 | 35 | 12 | 36 | 0 |
| 49 | 25 | 19 | 26 | 8 | 26 | 57 | 27 | 46 | 28 | 35 | 29 | 24 | 30 | 13 | 31 | 2 | 31 | 51 | 32 | 40 | 33 | 29 | 34 | 18 | 35 | 7 | 35 | 56 | 36 | 45 |
| 50 | 25 | 50 | 26 | 40 | 27 | 30 | 28 | 20 | 29 | 10 | 30 | 0 | 30 | 50 | 31 | 40 | 32 | 30 | 33 | 20 | 34 | 10 | 35 | 0 | 35 | 50 | 36 | 40 | 37 | 30 |
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| 52 | 26 | 52 | 27 | 44 | 28 | 36 | 29 | 28 | 30 | 20 | 31 | 12 | 32 | 4 | 32 | 56 | 33 | 48 | 34 | 40 | 35 | 32 | 36 | 24 | 37 | 16 | 38 | 8 | 39 | 0 |
| 53 | 27 | 23 | 28 | 16 | 29 | 9 | 30 | 2 | 30 | 55 | 31 | 48 | 32 | 41 | 33 | 34 | 34 | 27 | 35 | 20 | 36 | 13 | 37 | 6 | 37 | 59 | 38 | 52 | 39 | 45 |
| 54 | 27 | 54 | 28 | 48 | 29 | 42 | 30 | 36 | 31 | 30 | 32 | 24 | 33 | 18 | 34 | 12 | 35 | 6 | 36 | 0 | 36 | 54 | 37 | 48 | 38 | 42 | 39 | 36 | 40 | 30 |
| 55 | 28 | 25 | 29 | 20 | 30 | 15 | 31 | 10 | 32 | 5 | 33 | 0 | 33 | 55 | 34 | 50 | 35 | 45 | 36 | 40 | 37 | 35 | 38 | 30 | 39 | 25 | 40 | 20 | 41 | 15 |
| 56 | 28 | 56 | 29 | 52 | 30 | 48 | 31 | 44 | 32 | 40 | 33 | 36 | 34 | 32 | 35 | 28 | 36 | 24 | 37 | 20 | 38 | 16 | 39 | 12 | 40 | 8 | 41 | 4 | 42 | 0 |
| 57 | 29 | 27 | 30 | 24 | 31 | 21 | 32 | 18 | 33 | 15 | 34 | 12 | 35 | 9 | 36 | 6 | 37 | 3 | 38 | 0 | 38 | 57 | 39 | 54 | 40 | 51 | 41 | 48 | 42 | 45 |
| 58 | 29 | 58 | 30 | 56 | 31 | 54 | 32 | 52 | 33 | 50 | 34 | 48 | 35 | 46 | 36 | 44 | 37 | 42 | 38 | 40 | 39 | 38 | 40 | 36 | 41 | 34 | 42 | 32 | 43 | 30 |
| 59 | 30 | 29 | 31 | 28 | 32 | 27 | 33 | 26 | 34 | 25 | 35 | 24 | 36 | 23 | 37 | 22 | 38 | 21 | 39 | 20 | 40 | 19 | 41 | 18 | 42 | 17 | 43 | 16 | 44 | 15 |
| 60 | 31 | 0 | 32 | 0 | 33 | 0 | 34 | 0 | 35 | 0 | 36 | 0 | 37 | 0 | 38 | 0 | 39 | 0 | 40 | 0 | 41 | 0 | 42 | 0 | 43 | 0 | 44 | 0 | 45 | 0 |

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| | 46 | | 47 | | 48 | | 49 | | 50 | | 51 | | 52 | | 53 | | 54 | | 55 | | 56 | | 57 | | 58 | | 59 | | 60 | |
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| | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ | m | ʒ |
| 1 | 0 | 46 | 0 | 47 | 0 | 48 | 0 | 49 | 0 | 50 | 0 | 51 | 0 | 52 | 0 | 53 | 0 | 54 | 0 | 55 | 0 | 56 | 0 | 57 | 0 | 58 | 0 | [illegible] | 0 | 59 |
| 2 | 1 | 32 | 1 | 34 | 1 | 36 | 1 | 38 | 1 | 40 | 1 | 42 | 1 | 44 | 1 | 46 | 1 | 48 | 1 | 50 | 1 | 52 | 1 | 54 | 1 | 56 | 1 | 2 | 0 | 58 |
| 3 | 2 | 18 | 2 | 21 | 2 | 24 | 2 | 27 | 2 | 30 | 2 | 33 | 2 | 36 | 2 | 39 | 2 | 42 | 2 | 45 | 2 | 48 | 2 | 51 | 2 | 54 | 2 | 3 | 0 | 57 |
| 4 | 3 | 4 | 3 | 8 | 3 | 12 | 3 | 16 | 3 | 20 | 3 | 24 | 3 | 28 | 3 | 32 | 3 | 36 | 3 | 40 | 3 | 44 | 3 | 48 | 3 | 52 | 3 | 4 | 0 | 56 |
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| 6 | 4 | 36 | 4 | 42 | 4 | 48 | 4 | 54 | 5 | 0 | 5 | 6 | 5 | 12 | 5 | 18 | 5 | 24 | 5 | 30 | 5 | 36 | 5 | 42 | 5 | 48 | 5 | 6 | 0 | 54 |
| 7 | 5 | 22 | 5 | 29 | 5 | 36 | 5 | 43 | 5 | 50 | 5 | 57 | 6 | 4 | 6 | 11 | 6 | 18 | 6 | 25 | 6 | 32 | 6 | 39 | 6 | 46 | 6 | 7 | 0 | 53 |
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| 9 | 6 | 54 | 7 | 3 | 7 | 12 | 7 | 21 | 7 | 30 | 7 | 39 | 7 | 48 | 7 | 57 | 8 | 6 | 8 | 15 | 8 | 24 | 8 | 33 | 8 | 42 | 8 | 9 | 0 | 51 |
| 10 | 7 | 40 | 7 | 50 | 8 | 0 | 8 | 10 | 8 | 20 | 8 | 30 | 8 | 40 | 8 | 50 | 9 | 0 | 9 | 10 | 9 | 20 | 9 | 30 | 9 | 40 | 9 | 10 | 0 | 50 |
| 11 | 8 | 26 | 8 | 37 | 8 | 48 | 8 | 59 | 9 | 10 | 9 | 21 | 9 | 32 | 9 | 43 | 9 | 54 | 10 | 5 | 10 | 16 | 10 | 27 | 10 | 38 | 10 | 11 | 0 | 49 |
| 12 | 9 | 12 | 9 | 24 | 9 | 36 | 9 | 48 | 10 | 0 | 10 | 12 | 10 | 24 | 10 | 36 | 10 | 48 | 11 | 0 | 11 | 12 | 11 | 24 | 11 | 36 | 11 | 12 | 0 | 48 |
| 13 | 9 | 58 | 10 | 11 | 10 | 24 | 10 | 37 | 10 | 50 | 11 | 3 | 11 | 16 | 11 | 29 | 11 | 42 | 11 | 55 | 12 | 8 | 12 | 21 | 12 | 34 | 12 | 13 | 0 | 47 |
| 14 | 10 | 44 | 10 | 58 | 11 | 12 | 11 | 26 | 11 | 40 | 11 | 54 | 12 | 8 | 12 | 22 | 12 | 36 | 12 | 50 | 13 | 4 | 13 | 18 | 13 | 32 | 13 | 14 | 0 | 46 |
| 15 | 11 | 30 | 11 | 45 | 12 | 0 | 12 | 15 | 12 | 30 | 12 | 45 | 13 | 0 | 13 | 15 | 13 | 30 | 13 | 45 | 14 | 0 | 14 | 15 | 14 | 30 | 14 | 15 | 0 | 45 |
| 16 | 12 | 16 | 12 | 32 | 12 | 48 | 13 | 4 | 13 | 20 | 13 | 36 | 13 | 52 | 14 | 8 | 14 | 24 | 14 | 40 | 14 | 56 | 15 | 12 | 15 | 28 | 15 | 16 | 0 | 44 |
| 17 | 13 | 2 | 13 | 19 | 13 | 36 | 13 | 53 | 14 | 10 | 14 | 27 | 14 | 44 | 15 | 1 | 15 | 18 | 15 | 35 | 15 | 52 | 16 | 9 | 16 | 26 | 16 | 17 | 0 | 43 |
| 18 | 13 | 48 | 14 | 6 | 14 | 24 | 14 | 42 | 15 | 0 | 15 | 18 | 15 | 36 | 15 | 54 | 16 | 12 | 16 | 30 | 16 | 48 | 17 | 6 | 17 | 24 | 17 | 18 | 0 | 42 |
| 19 | 14 | 34 | 14 | 53 | 15 | 12 | 15 | 31 | 15 | 50 | 16 | 9 | 16 | 28 | 16 | 47 | 17 | 6 | 17 | 25 | 17 | 44 | 18 | 3 | 18 | 22 | 18 | 19 | 0 | 41 |
| 20 | 15 | 20 | 15 | 40 | 16 | 0 | 16 | 20 | 16 | 40 | 17 | 0 | 17 | 20 | 17 | 40 | 18 | 0 | 18 | 20 | 18 | 40 | 19 | 0 | 19 | 20 | 19 | 20 | 0 | 40 |
| 21 | 16 | 6 | 16 | 27 | 16 | 48 | 17 | 9 | 17 | 30 | 17 | 51 | 18 | 12 | 18 | 33 | 18 | 54 | 19 | 15 | 19 | 36 | 19 | 57 | 20 | 18 | 20 | 21 | 0 | 39 |
| 22 | 16 | 52 | 17 | 14 | 17 | 36 | 17 | 58 | 18 | 20 | 18 | 42 | 19 | 4 | 19 | 26 | 19 | 48 | 20 | 10 | 20 | 32 | 20 | 54 | 21 | 16 | 21 | 22 | 0 | 38 |
| 23 | 17 | 38 | 18 | 1 | 18 | 24 | 18 | 47 | 19 | 10 | 19 | 33 | 19 | 56 | 20 | 19 | 20 | 42 | 21 | 5 | 21 | 28 | 21 | 51 | 22 | 14 | 22 | 23 | 0 | 37 |
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| 30 | 23 | 0 | 23 | 30 | 24 | 0 | 24 | 30 | 25 | 0 | 25 | 30 | 26 | 0 | 26 | 30 | 27 | 0 | 27 | 30 | 28 | 0 | 28 | 30 | 29 | 0 | 29 | 30 | 0 | 30 |
| 31 | 23 | 46 | 24 | 17 | 24 | 48 | 25 | 19 | 25 | 50 | 26 | 21 | 26 | 52 | 27 | 23 | 27 | 54 | 28 | 25 | 28 | 56 | 29 | 27 | 29 | 58 | 30 | 31 | 0 | 29 |
| 32 | 24 | 32 | 25 | 4 | 25 | 36 | 26 | 8 | 26 | 40 | 27 | 12 | 27 | 44 | 28 | 16 | 28 | 48 | 29 | 20 | 29 | 52 | 30 | 24 | 30 | 56 | 31 | 32 | 0 | 28 |
| 33 | 25 | 18 | 25 | 51 | 26 | 24 | 26 | 57 | 27 | 30 | 28 | 3 | 28 | 36 | 29 | 9 | 29 | 42 | 30 | 15 | 30 | 48 | 31 | 21 | 31 | 54 | 32 | 33 | 0 | 27 |
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| 35 | 26 | 50 | 27 | 25 | 28 | 0 | 28 | 35 | 29 | 10 | 29 | 45 | 30 | 20 | 30 | 55 | 31 | 30 | 32 | 5 | 32 | 40 | 33 | 15 | 33 | 50 | 34 | 35 | 0 | 25 |
| 36 | 27 | 36 | 28 | 12 | 28 | 48 | 29 | 24 | 30 | 0 | 30 | 36 | 31 | 12 | 31 | 48 | 32 | 24 | 33 | 0 | 33 | 36 | 34 | 12 | 34 | 48 | 35 | 36 | 0 | 24 |
| 37 | 28 | 22 | 28 | 59 | 29 | 36 | 30 | 13 | 30 | 50 | 31 | 27 | 32 | 4 | 32 | 41 | 33 | 18 | 33 | 55 | 34 | 32 | 35 | 9 | 35 | 46 | 36 | 37 | 0 | 23 |
| 38 | 29 | 8 | 29 | 46 | 30 | 24 | 31 | 2 | 31 | 40 | 32 | 18 | 32 | 56 | 33 | 34 | 34 | 12 | 34 | 50 | 35 | 28 | 36 | 6 | 36 | 44 | 37 | 38 | 0 | 22 |
| 39 | 29 | 54 | 30 | 33 | 31 | 12 | 31 | 51 | 32 | 30 | 33 | 9 | 33 | 48 | 34 | 27 | 35 | 6 | 35 | 45 | 36 | 24 | 37 | 3 | 37 | 42 | 38 | 39 | 0 | 21 |
| 40 | 30 | 40 | 31 | 20 | 32 | 0 | 32 | 40 | 33 | 20 | 34 | 0 | 34 | 40 | 35 | 20 | 36 | 0 | 36 | 40 | 37 | 20 | 38 | 0 | 38 | 40 | 39 | 40 | 0 | 20 |
| 41 | 31 | 26 | 32 | 7 | 32 | 48 | 33 | 29 | 34 | 10 | 34 | 51 | 35 | 32 | 36 | 13 | 36 | 54 | 37 | 35 | 38 | 16 | 38 | 57 | 39 | 38 | 40 | 41 | 0 | 19 |
| 42 | 32 | 12 | 32 | 54 | 33 | 36 | 34 | 18 | 35 | 0 | 35 | 42 | 36 | 24 | 37 | 6 | 37 | 48 | 38 | 30 | 39 | 12 | 39 | 54 | 40 | 36 | 41 | 42 | 0 | 18 |
| 43 | 32 | 58 | 33 | 41 | 34 | 24 | 35 | 7 | 35 | 50 | 36 | 33 | 37 | 16 | 37 | 59 | 38 | 42 | 39 | 25 | 40 | 8 | 40 | 51 | 41 | 34 | 42 | 43 | 0 | 17 |
| 44 | 33 | 44 | 34 | 28 | 35 | 12 | 35 | 56 | 36 | 40 | 37 | 24 | 38 | 8 | 38 | 52 | 39 | 36 | 40 | 20 | 41 | 4 | 41 | 48 | 42 | 32 | 43 | 44 | 0 | 16 |
| 45 | 34 | 30 | 35 | 15 | 36 | 0 | 36 | 45 | 37 | 30 | 38 | 15 | 39 | 0 | 39 | 45 | 40 | 30 | 41 | 15 | 42 | 0 | 42 | 45 | 43 | 30 | 44 | 45 | 0 | 15 |
| 46 | 35 | 16 | 36 | 2 | 36 | 48 | 37 | 34 | 38 | 20 | 39 | 6 | 39 | 52 | 40 | 38 | 41 | 24 | 42 | 10 | 42 | 56 | 43 | 42 | 44 | 28 | 45 | 46 | 0 | 14 |
| 47 | 36 | 2 | 36 | 49 | 37 | 36 | 38 | 23 | 39 | 10 | 39 | 57 | 40 | 44 | 41 | 31 | 42 | 18 | 43 | 5 | 43 | 52 | 44 | 39 | 45 | 26 | 46 | 47 | 0 | 13 |
| 48 | 36 | 48 | 37 | 36 | 38 | 24 | 39 | 12 | 40 | 0 | 40 | 48 | 41 | 36 | 42 | 24 | 43 | 12 | 44 | 0 | 44 | 48 | 45 | 36 | 46 | 24 | 47 | 48 | 0 | 12 |
| 49 | 37 | 34 | 38 | 23 | 39 | 12 | 40 | 1 | 40 | 50 | 41 | 39 | 42 | 28 | 43 | 17 | 44 | 6 | 44 | 55 | 45 | 44 | 46 | 33 | 47 | 22 | 48 | 49 | 0 | 11 |
| 50 | 38 | 20 | 39 | 10 | 40 | 0 | 40 | 50 | 41 | 40 | 42 | 30 | 43 | 20 | 44 | 10 | 45 | 0 | 45 | 50 | 46 | 40 | 47 | 30 | 48 | 20 | 49 | 50 | 0 | 10 |
| 51 | 39 | 6 | 39 | 57 | 40 | 48 | 41 | 39 | 42 | 30 | 43 | 21 | 44 | 12 | 45 | 3 | 45 | 54 | 46 | 45 | 47 | 36 | 48 | 27 | 49 | 18 | 50 | 51 | 0 | 9 |
| 52 | 39 | 52 | 40 | 44 | 41 | 36 | 42 | 28 | 43 | 20 | 44 | 12 | 45 | 4 | 45 | 56 | 46 | 48 | 47 | 40 | 48 | 32 | 49 | 24 | 50 | 16 | 51 | 52 | 0 | 8 |
| 53 | 40 | 38 | 41 | 31 | 42 | 24 | 43 | 17 | 44 | 10 | 45 | 3 | 45 | 56 | 46 | 49 | 47 | 42 | 48 | 35 | 49 | 28 | 50 | 21 | 51 | 14 | 52 | 53 | 0 | 7 |
| 54 | 41 | 24 | 42 | 18 | 43 | 12 | 44 | 6 | 45 | 0 | 45 | 54 | 46 | 48 | 47 | 42 | 48 | 36 | 49 | 30 | 50 | 24 | 51 | 18 | 52 | 12 | 53 | 54 | 0 | 6 |
| 55 | 42 | 10 | 43 | 5 | 44 | 0 | 44 | 55 | 45 | 50 | 46 | 45 | 47 | 40 | 48 | 35 | 49 | 30 | 50 | 25 | 51 | 20 | 52 | 15 | 53 | 10 | 54 | 55 | 0 | 5 |
| 56 | 42 | 56 | 43 | 52 | 44 | 48 | 45 | 44 | 46 | 40 | 47 | 36 | 48 | 32 | 49 | 28 | 50 | 24 | 51 | 20 | 52 | 16 | 53 | 12 | 54 | 8 | 55 | 56 | 0 | 4 |
| 57 | 43 | 42 | 44 | 39 | 45 | 36 | 46 | 33 | 47 | 30 | 48 | 27 | 49 | 24 | 50 | 21 | 51 | 18 | 52 | 15 | 53 | 12 | 54 | 9 | 55 | 6 | 56 | 57 | 0 | 3 |
| 58 | 44 | 28 | 45 | 26 | 46 | 24 | 47 | 22 | 48 | 20 | 49 | 18 | 50 | 16 | 51 | 14 | 52 | 12 | 53 | 10 | 54 | 8 | 55 | 6 | 56 | 4 | 57 | 58 | 0 | 2 |
| 59 | 45 | 14 | 46 | 13 | 47 | 12 | 48 | 11 | 49 | 10 | 50 | 9 | 51 | 8 | 52 | 7 | 53 | 6 | 54 | 5 | 55 | 4 | 56 | 3 | 57 | 2 | 58 | 59 | 0 | 1 |
| 60 | 46 | 0 | 47 | 0 | 48 | 0 | 49 | 0 | 50 | 0 | 51 | 0 | 52 | 0 | 53 | 0 | 54 | 0 | 55 | 0 | 56 | 0 | 57 | 0 | 58 | 0 | 59 | 0 | 0 | 0 |

# Incipiunt tabule minutorum proporcionalium pro die

| Hora | | Dies secunda | | | Dies tercia | | | Dies quarta | | | Quinta dies | | | Sexta dies | | | Septima dies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| g | m | g | m | 2 | g | m | 2 | g | m | 2 | g | m | 2 | g | m | 2 | g | m | 2 | 3 |
| 0 | 1 | 0 | 0 | 30 | 0 | 0 | 20 | 0 | 0 | 15 | 0 | 0 | 12 | 0 | 0 | 10 | 0 | 0 | 8 | 34 |
| 0 | 2 | 0 | 1 | 0 | 0 | 0 | 40 | 0 | 0 | 30 | 0 | 0 | 24 | 0 | 0 | 20 | 0 | 0 | 17 | 9 |
| 0 | 3 | 0 | 1 | 30 | 0 | 1 | 0 | 0 | 0 | 45 | 0 | 0 | 36 | 0 | 0 | 30 | 0 | 0 | 25 | 43 |
| 0 | 4 | 0 | 2 | 0 | 0 | 1 | 20 | 0 | 1 | 0 | 0 | 0 | 48 | 0 | 0 | 40 | 0 | 0 | 34 | 17 |
| 0 | 5 | 0 | 2 | 30 | 0 | 1 | 40 | 0 | 1 | 15 | 0 | 1 | 0 | 0 | 0 | 50 | 0 | 0 | 42 | 51 |
| 0 | 6 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 1 | 30 | 0 | 1 | 12 | 0 | 1 | 0 | 0 | 0 | 51 | 26 |
| 0 | 7 | 0 | 3 | 30 | 0 | 2 | 20 | 0 | 1 | 45 | 0 | 1 | 24 | 0 | 1 | 10 | 0 | 1 | 0 | 0 |
| 0 | 8 | 0 | 4 | 0 | 0 | 2 | 40 | 0 | 2 | 0 | 0 | 1 | 36 | 0 | 1 | 20 | 0 | 1 | 8 | 34 |
| 0 | 9 | 0 | 4 | 30 | 0 | 3 | 0 | 0 | 2 | 15 | 0 | 1 | 48 | 0 | 1 | 30 | 0 | 1 | 17 | 9 |
| 0 | 10 | 0 | 5 | 0 | 0 | 3 | 20 | 0 | 2 | 30 | 0 | 2 | 0 | 0 | 1 | 40 | 0 | 1 | 25 | 43 |
| 0 | 11 | 0 | 5 | 30 | 0 | 3 | 40 | 0 | 2 | 45 | 0 | 2 | 12 | 0 | 1 | 50 | 0 | 1 | 34 | 17 |
| 0 | 12 | 0 | 6 | 0 | 0 | 4 | 0 | 0 | 3 | 0 | 0 | 2 | 24 | 0 | 2 | 0 | 0 | 1 | 42 | 51 |
| 0 | 13 | 0 | 6 | 30 | 0 | 4 | 20 | 0 | 3 | 15 | 0 | 2 | 36 | 0 | 2 | 10 | 0 | 1 | 51 | 26 |
| 0 | 14 | 0 | 7 | 0 | 0 | 4 | 40 | 0 | 3 | 30 | 0 | 2 | 48 | 0 | 2 | 20 | 0 | 2 | 0 | 0 |
| 0 | 15 | 0 | 7 | 30 | 0 | 5 | 0 | 0 | 3 | 45 | 0 | 3 | 0 | 0 | 2 | 30 | 0 | 2 | 8 | 34 |
| 0 | 16 | 0 | 8 | 0 | 0 | 5 | 20 | 0 | 4 | 0 | 0 | 3 | 12 | 0 | 2 | 40 | 0 | 2 | 17 | 9 |
| 0 | 17 | 0 | 8 | 30 | 0 | 5 | 40 | 0 | 4 | 15 | 0 | 3 | 24 | 0 | 2 | 50 | 0 | 2 | 25 | 43 |
| 0 | 18 | 0 | 9 | 0 | 0 | 6 | 0 | 0 | 4 | 30 | 0 | 3 | 36 | 0 | 3 | 0 | 0 | 2 | 34 | 17 |
| 0 | 19 | 0 | 9 | 30 | 0 | 6 | 20 | 0 | 4 | 45 | 0 | 3 | 48 | 0 | 3 | 10 | 0 | 2 | 42 | 51 |
| 0 | 20 | 0 | 10 | 0 | 0 | 6 | 40 | 0 | 5 | 0 | 0 | 4 | 0 | 0 | 3 | 20 | 0 | 2 | 51 | 26 |
| 0 | 21 | 0 | 10 | 30 | 0 | 7 | 0 | 0 | 5 | 15 | 0 | 4 | 12 | 0 | 3 | 30 | 0 | 3 | 0 | 0 |
| 0 | 22 | 0 | 11 | 0 | 0 | 7 | 20 | 0 | 5 | 30 | 0 | 4 | 24 | 0 | 3 | 40 | 0 | 3 | 8 | 34 |
| 0 | 23 | 0 | 11 | 30 | 0 | 7 | 40 | 0 | 5 | 45 | 0 | 4 | 36 | 0 | 3 | 50 | 0 | 3 | 17 | 9 |
| 0 | 24 | 0 | 12 | 0 | 0 | 8 | 0 | 0 | 6 | 0 | 0 | 4 | 48 | 0 | 4 | 0 | 0 | 3 | 25 | 43 |
| 0 | 25 | 0 | 12 | 30 | 0 | 8 | 20 | 0 | 6 | 15 | 0 | 5 | 0 | 0 | 4 | 10 | 0 | 3 | 34 | 17 |
| 0 | 26 | 0 | 13 | 0 | 0 | 8 | 40 | 0 | 6 | 30 | 0 | 5 | 12 | 0 | 4 | 20 | 0 | 3 | 42 | 51 |
| 0 | 27 | 0 | 13 | 30 | 0 | 9 | 0 | 0 | 6 | 45 | 0 | 5 | 24 | 0 | 4 | 30 | 0 | 3 | 51 | 26 |
| 0 | 28 | 0 | 14 | 0 | 0 | 9 | 20 | 0 | 7 | 0 | 0 | 5 | 36 | 0 | 4 | 40 | 0 | 4 | 0 | 0 |
| 0 | 29 | 0 | 14 | 30 | 0 | 9 | 40 | 0 | 7 | 15 | 0 | 5 | 48 | 0 | 4 | 50 | 0 | 4 | 8 | 34 |
| 0 | 30 | 0 | 15 | 0 | 0 | 10 | 0 | 0 | 7 | 30 | 0 | 6 | 0 | 0 | 5 | 0 | 0 | 4 | 17 | 9 |
| 0 | 31 | 0 | 15 | 30 | 0 | 10 | 20 | 0 | 7 | 45 | 0 | 6 | 12 | 0 | 5 | 10 | 0 | 4 | 25 | 43 |
| 0 | 32 | 0 | 16 | 0 | 0 | 10 | 40 | 0 | 8 | 0 | 0 | 6 | 24 | 0 | 5 | 20 | 0 | 4 | 34 | 17 |
| 0 | 33 | 0 | 16 | 30 | 0 | 11 | 0 | 0 | 8 | 15 | 0 | 6 | 36 | 0 | 5 | 30 | 0 | 4 | 42 | 51 |
| 0 | 34 | 0 | 17 | 0 | 0 | 11 | 20 | 0 | 8 | 30 | 0 | 6 | 48 | 0 | 5 | 40 | 0 | 4 | 51 | 26 |
| 0 | 35 | 0 | 17 | 30 | 0 | 11 | 40 | 0 | 8 | 45 | 0 | 7 | 0 | 0 | 5 | 50 | 0 | 5 | 0 | 0 |
| 0 | 36 | 0 | 18 | 0 | 0 | 12 | 0 | 0 | 9 | 0 | 0 | 7 | 12 | 0 | 6 | 0 | 0 | 5 | 8 | 34 |
| 0 | 37 | 0 | 18 | 30 | 0 | 12 | 20 | 0 | 9 | 15 | 0 | 7 | 24 | 0 | 6 | 10 | 0 | 5 | 17 | 9 |
| 0 | 38 | 0 | 19 | 0 | 0 | 12 | 40 | 0 | 9 | 30 | 0 | 7 | 36 | 0 | 6 | 20 | 0 | 5 | 25 | 43 |
| 0 | 39 | 0 | 19 | 30 | 0 | 13 | 0 | 0 | 9 | 45 | 0 | 7 | 48 | 0 | 6 | 30 | 0 | 5 | 34 | 17 |
| 0 | 40 | 0 | 20 | 0 | 0 | 13 | 20 | 0 | 10 | 0 | 0 | 8 | 0 | 0 | 6 | 40 | 0 | 5 | 42 | 51 |
| 0 | 41 | 0 | 20 | 30 | 0 | 13 | 40 | 0 | 10 | 15 | 0 | 8 | 12 | 0 | 6 | 50 | 0 | 5 | 51 | 26 |
| 0 | 42 | 0 | 21 | 0 | 0 | 14 | 0 | 0 | 10 | 30 | 0 | 8 | 24 | 0 | 7 | 0 | 0 | 6 | 0 | 0 |
| 0 | 43 | 0 | 21 | 30 | 0 | 14 | 20 | 0 | 10 | 45 | 0 | 8 | 36 | 0 | 7 | 10 | 0 | 6 | 8 | 34 |
| 0 | 44 | 0 | 22 | 0 | 0 | 14 | 40 | 0 | 11 | 0 | 0 | 8 | 48 | 0 | 7 | 20 | 0 | 6 | 17 | 9 |
| 0 | 45 | 0 | 22 | 30 | 0 | 15 | 0 | 0 | 11 | 15 | 0 | 9 | 0 | 0 | 7 | 30 | 0 | 6 | 25 | 43 |
| 0 | 46 | 0 | 23 | 0 | 0 | 15 | 20 | 0 | 11 | 30 | 0 | 9 | 12 | 0 | 7 | 40 | 0 | 6 | 34 | 17 |
| 0 | 47 | 0 | 23 | 30 | 0 | 15 | 40 | 0 | 11 | 45 | 0 | 9 | 24 | 0 | 7 | 50 | 0 | 6 | 42 | 51 |
| 0 | 48 | 0 | 24 | 0 | 0 | 16 | 0 | 0 | 12 | 0 | 0 | 9 | 36 | 0 | 8 | 0 | 0 | 6 | 51 | 26 |
| 0 | 49 | 0 | 24 | 30 | 0 | 16 | 20 | 0 | 12 | 15 | 0 | 9 | 48 | 0 | 8 | 10 | 0 | 7 | 0 | 0 |
| 0 | 50 | 0 | 25 | 0 | 0 | 16 | 40 | 0 | 12 | 30 | 0 | 10 | 0 | 0 | 8 | 20 | 0 | 7 | 8 | 34 |
| 0 | 51 | 0 | 25 | 30 | 0 | 17 | 0 | 0 | 12 | 45 | 0 | 10 | 12 | 0 | 8 | 30 | 0 | 7 | 17 | 9 |
| 0 | 52 | 0 | 26 | 0 | 0 | 17 | 20 | 0 | 13 | 0 | 0 | 10 | 24 | 0 | 8 | 40 | 0 | 7 | 25 | 43 |
| 0 | 53 | 0 | 26 | 30 | 0 | 17 | 40 | 0 | 13 | 15 | 0 | 10 | 36 | 0 | 8 | 50 | 0 | 7 | 34 | 17 |
| 0 | 54 | 0 | 27 | 0 | 0 | 18 | 0 | 0 | 13 | 30 | 0 | 10 | 48 | 0 | 9 | 0 | 0 | 7 | 42 | 51 |
| 0 | 55 | 0 | 27 | 30 | 0 | 18 | 20 | 0 | 13 | 45 | 0 | 11 | 0 | 0 | 9 | 10 | 0 | 7 | 51 | 26 |
| 0 | 56 | 0 | 28 | 0 | 0 | 18 | 40 | 0 | 14 | 0 | 0 | 11 | 12 | 0 | 9 | 20 | 0 | 8 | 0 | 0 |
| 0 | 57 | 0 | 28 | 30 | 0 | 19 | 0 | 0 | 14 | 15 | 0 | 11 | 24 | 0 | 9 | 30 | 0 | 8 | 8 | 34 |
| 0 | 58 | 0 | 29 | 0 | 0 | 19 | 20 | 0 | 14 | 30 | 0 | 11 | 36 | 0 | 9 | 40 | 0 | 8 | 17 | 9 |
| 0 | 59 | 0 | 29 | 30 | 0 | 19 | 40 | 0 | 14 | 45 | 0 | 11 | 48 | 0 | 9 | 50 | 0 | 8 | 25 | 43 |
| 1 | 0 | 0 | 30 | 0 | 0 | 20 | 0 | 0 | 15 | 0 | 0 | 12 | 0 | 0 | 10 | 0 | 0 | 8 | 34 | 17 |

| Hora | | Secunda dies | | | Tercia dies | | | Quarta dies | | | Quinta dies | | | Sexta dies | | | Septima dies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| g | m | g | m | 2 | g | m | 2 | g | m | 2 | g | m | 2 | g | m | 2 | g | m | 2 | 3 |
| 1 | 1 | 0 | 30 | 30 | 0 | 20 | 20 | 0 | 15 | 15 | 0 | 12 | 12 | 0 | 10 | 10 | 0 | 8 | 42 | 51 |
| 1 | 2 | 0 | 31 | 0 | 0 | 20 | 40 | 0 | 15 | 30 | 0 | 12 | 24 | 0 | 10 | 20 | 0 | 8 | 51 | 26 |
| 1 | 3 | 0 | 31 | 30 | 0 | 21 | 0 | 0 | 15 | 45 | 0 | 12 | 36 | 0 | 10 | 30 | 0 | 9 | 0 | 0 |
| 1 | 4 | 0 | 32 | 0 | 0 | 21 | 20 | 0 | 16 | 0 | 0 | 12 | 48 | 0 | 10 | 40 | 0 | 9 | 8 | 34 |
| 1 | 5 | 0 | 32 | 30 | 0 | 21 | 40 | 0 | 16 | 15 | 0 | 13 | 0 | 0 | 10 | 50 | 0 | 9 | 17 | 9 |
| 1 | 6 | 0 | 33 | 0 | 0 | 22 | 0 | 0 | 16 | 30 | 0 | 13 | 12 | 0 | 11 | 0 | 0 | 9 | 25 | 43 |
| 1 | 7 | 0 | 33 | 30 | 0 | 22 | 20 | 0 | 16 | 45 | 0 | 13 | 24 | 0 | 11 | 10 | 0 | 9 | 34 | 17 |
| 1 | 8 | 0 | 34 | 0 | 0 | 22 | 40 | 0 | 17 | 0 | 0 | 13 | 36 | 0 | 11 | 20 | 0 | 9 | 42 | 51 |
| 1 | 9 | 0 | 34 | 30 | 0 | 23 | 0 | 0 | 17 | 15 | 0 | 13 | 48 | 0 | 11 | 30 | 0 | 9 | 51 | 26 |
| 1 | 10 | 0 | 35 | 0 | 0 | 23 | 20 | 0 | 17 | 30 | 0 | 14 | 0 | 0 | 11 | 40 | 0 | 10 | 0 | 0 |
| 1 | 11 | 0 | 35 | 30 | 0 | 23 | 40 | 0 | 17 | 45 | 0 | 14 | 12 | 0 | 11 | 50 | 0 | 10 | 8 | 34 |
| 1 | 12 | 0 | 36 | 0 | 0 | 24 | 0 | 0 | 18 | 0 | 0 | 14 | 24 | 0 | 12 | 0 | 0 | 10 | 17 | 9 |
| 1 | 13 | 0 | 36 | 30 | 0 | 24 | 20 | 0 | 18 | 15 | 0 | 14 | 36 | 0 | 12 | 10 | 0 | 10 | 25 | 43 |
| 1 | 14 | 0 | 37 | 0 | 0 | 24 | 40 | 0 | 18 | 30 | 0 | 14 | 48 | 0 | 12 | 20 | 0 | 10 | 34 | 17 |
| 1 | 15 | 0 | 37 | 30 | 0 | 25 | 0 | 0 | 18 | 45 | 0 | 15 | 0 | 0 | 12 | 30 | 0 | 10 | 42 | 51 |
| 1 | 16 | 0 | 38 | 0 | 0 | 25 | 20 | 0 | 19 | 0 | 0 | 15 | 12 | 0 | 12 | 40 | 0 | 10 | 51 | 26 |
| 1 | 17 | 0 | 38 | 30 | 0 | 25 | 40 | 0 | 19 | 15 | 0 | 15 | 24 | 0 | 12 | 50 | 0 | 11 | 0 | 0 |
| 1 | 18 | 0 | 39 | 0 | 0 | 26 | 0 | 0 | 19 | 30 | 0 | 15 | 36 | 0 | 13 | 0 | 0 | 11 | 8 | 34 |
| 1 | 19 | 0 | 39 | 30 | 0 | 26 | 20 | 0 | 19 | 45 | 0 | 15 | 48 | 0 | 13 | 10 | 0 | 11 | 17 | 9 |
| 1 | 20 | 0 | 40 | 0 | 0 | 26 | 40 | 0 | 20 | 0 | 0 | 16 | 0 | 0 | 13 | 20 | 0 | 11 | 25 | 43 |
| 1 | 21 | 0 | 40 | 30 | 0 | 27 | 0 | 0 | 20 | 15 | 0 | 16 | 12 | 0 | 13 | 30 | 0 | 11 | 34 | 17 |
| 1 | 22 | 0 | 41 | 0 | 0 | 27 | 20 | 0 | 20 | 30 | 0 | 16 | 24 | 0 | 13 | 40 | 0 | 11 | 42 | 51 |
| 1 | 23 | 0 | 41 | 30 | 0 | 27 | 40 | 0 | 20 | 45 | 0 | 16 | 36 | 0 | 13 | 50 | 0 | 11 | 51 | 26 |
| 1 | 24 | 0 | 42 | 0 | 0 | 28 | 0 | 0 | 21 | 0 | 0 | 16 | 48 | 0 | 14 | 0 | 0 | 12 | 0 | 0 |
| 1 | 25 | 0 | 42 | 30 | 0 | 28 | 20 | 0 | 21 | 15 | 0 | 17 | 0 | 0 | 14 | 10 | 0 | 12 | 8 | 34 |
| 1 | 26 | 0 | 43 | 0 | 0 | 28 | 40 | 0 | 21 | 30 | 0 | 17 | 12 | 0 | 14 | 20 | 0 | 12 | 17 | 9 |
| 1 | 27 | 0 | 43 | 30 | 0 | 29 | 0 | 0 | 21 | 45 | 0 | 17 | 24 | 0 | 14 | 30 | 0 | 12 | 25 | 43 |
| 1 | 28 | 0 | 44 | 0 | 0 | 29 | 20 | 0 | 22 | 0 | 0 | 17 | 36 | 0 | 14 | 40 | 0 | 12 | 34 | 17 |
| 1 | 29 | 0 | 44 | 30 | 0 | 29 | 40 | 0 | 22 | 15 | 0 | 17 | 48 | 0 | 14 | 50 | 0 | 12 | 42 | 51 |
| 1 | 30 | 0 | 45 | 0 | 0 | 30 | 0 | 0 | 22 | 30 | 0 | 18 | 0 | 0 | 15 | 0 | 0 | 12 | 51 | 26 |
| 1 | 31 | 0 | 45 | 30 | 0 | 30 | 20 | 0 | 22 | 45 | 0 | 18 | 12 | 0 | 15 | 10 | 0 | 13 | 0 | 0 |
| 1 | 32 | 0 | 46 | 0 | 0 | 30 | 40 | 0 | 23 | 0 | 0 | 18 | 24 | 0 | 15 | 20 | 0 | 13 | 8 | 34 |
| 1 | 33 | 0 | 46 | 30 | 0 | 31 | 0 | 0 | 23 | 15 | 0 | 18 | 36 | 0 | 15 | 30 | 0 | 13 | 17 | 9 |
| 1 | 34 | 0 | 47 | 0 | 0 | 31 | 20 | 0 | 23 | 30 | 0 | 18 | 48 | 0 | 15 | 40 | 0 | 13 | 25 | 43 |
| 1 | 35 | 0 | 47 | 30 | 0 | 31 | 40 | 0 | 23 | 45 | 0 | 19 | 0 | 0 | 15 | 50 | 0 | 13 | 34 | 17 |
| 1 | 36 | 0 | 48 | 0 | 0 | 32 | 0 | 0 | 24 | 0 | 0 | 19 | 12 | 0 | 16 | 0 | 0 | 13 | 42 | 51 |
| 1 | 37 | 0 | 48 | 30 | 0 | 32 | 20 | 0 | 24 | 15 | 0 | 19 | 24 | 0 | 16 | 10 | 0 | 13 | 51 | 26 |
| 1 | 38 | 0 | 49 | 0 | 0 | 32 | 40 | 0 | 24 | 30 | 0 | 19 | 36 | 0 | 16 | 20 | 0 | 14 | 0 | 0 |
| 1 | 39 | 0 | 49 | 30 | 0 | 33 | 0 | 0 | 24 | 45 | 0 | 19 | 48 | 0 | 16 | 30 | 0 | 14 | 8 | 34 |
| 1 | 40 | 0 | 50 | 0 | 0 | 33 | 20 | 0 | 25 | 0 | 0 | 20 | 0 | 0 | 16 | 40 | 0 | 14 | 17 | 9 |
| 1 | 41 | 0 | 50 | 30 | 0 | 33 | 40 | 0 | 25 | 15 | 0 | 20 | 12 | 0 | 16 | 50 | 0 | 14 | 25 | 43 |
| 1 | 42 | 0 | 51 | 0 | 0 | 34 | 0 | 0 | 25 | 30 | 0 | 20 | 24 | 0 | 17 | 0 | 0 | 14 | 34 | 17 |
| 1 | 43 | 0 | 51 | 30 | 0 | 34 | 20 | 0 | 25 | 45 | 0 | 20 | 36 | 0 | 17 | 10 | 0 | 14 | 42 | 51 |
| 1 | 44 | 0 | 52 | 0 | 0 | 34 | 40 | 0 | 26 | 0 | 0 | 20 | 48 | 0 | 17 | 20 | 0 | 14 | 51 | 26 |
| 1 | 45 | 0 | 52 | 30 | 0 | 35 | 0 | 0 | 26 | 15 | 0 | 21 | 0 | 0 | 17 | 30 | 0 | 15 | 0 | 0 |
| 1 | 46 | 0 | 53 | 0 | 0 | 35 | 20 | 0 | 26 | 30 | 0 | 21 | 12 | 0 | 17 | 40 | 0 | 15 | 8 | 34 |
| 1 | 47 | 0 | 53 | 30 | 0 | 35 | 40 | 0 | 26 | 45 | 0 | 21 | 24 | 0 | 17 | 50 | 0 | 15 | 17 | 9 |
| 1 | 48 | 0 | 54 | 0 | 0 | 36 | 0 | 0 | 27 | 0 | 0 | 21 | 36 | 0 | 18 | 0 | 0 | 15 | 25 | 43 |
| 1 | 49 | 0 | 54 | 30 | 0 | 36 | 20 | 0 | 27 | 15 | 0 | 21 | 48 | 0 | 18 | 10 | 0 | 15 | 34 | 17 |
| 1 | 50 | 0 | 55 | 0 | 0 | 36 | 40 | 0 | 27 | 30 | 0 | 22 | 0 | 0 | 18 | 20 | 0 | 15 | 42 | 51 |
| 1 | 51 | 0 | 55 | 30 | 0 | 37 | 0 | 0 | 27 | 45 | 0 | 22 | 12 | 0 | 18 | 30 | 0 | 15 | 51 | 26 |
| 1 | 52 | 0 | 56 | 0 | 0 | 37 | 20 | 0 | 28 | 0 | 0 | 22 | 24 | 0 | 18 | 40 | 0 | 16 | 0 | 0 |
| 1 | 53 | 0 | 56 | 30 | 0 | 37 | 40 | 0 | 28 | 15 | 0 | 22 | 36 | 0 | 18 | 50 | 0 | 16 | 8 | 34 |
| 1 | 54 | 0 | 57 | 0 | 0 | 38 | 0 | 0 | 28 | 30 | 0 | 22 | 48 | 0 | 19 | 0 | 0 | 16 | 17 | 9 |
| 1 | 55 | 0 | 57 | 30 | 0 | 38 | 20 | 0 | 28 | 45 | 0 | 23 | 0 | 0 | 19 | 10 | 0 | 16 | 25 | 43 |
| 1 | 56 | 0 | 58 | 0 | 0 | 38 | 40 | 0 | 29 | 0 | 0 | 23 | 12 | 0 | 19 | 20 | 0 | 16 | 34 | 17 |
| 1 | 57 | 0 | 58 | 30 | 0 | 39 | 0 | 0 | 29 | 15 | 0 | 23 | 24 | 0 | 19 | 30 | 0 | 16 | 42 | 51 |
| 1 | 58 | 0 | 59 | 0 | 0 | 39 | 20 | 0 | 29 | 30 | 0 | 23 | 36 | 0 | 19 | 40 | 0 | 16 | 51 | 26 |
| 1 | 59 | 0 | 59 | 30 | 0 | 39 | 40 | 0 | 29 | 45 | 0 | 23 | 48 | 0 | 19 | 50 | 0 | 17 | 0 | 0 |
| 2 | 0 | [illegible] | 0 | 0 | 0 | 40 | 0 | 0 | 30 | 0 | 0 | 24 | 0 | 0 | 20 | 0 | 0 | 17 | 8 | 34 |

# bus in almanach faciendis

| dia | | Sc̃da dies | | | Tercia dies | | | Qrta dies | | | Quinta dies | | | Sexta dies | | | Septima dies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | m | | | | S | m | 2 | | | | S | m | 2 | | | | S | m | 2 | 3 |
| 2 | 1 | 1 | 0 | 30 | 0 | 40 | 20 | 0 | 30 | 15 | 0 | 24 | 12 | 0 | 20 | 10 | 0 | 17 | 17 | 9 |
| 2 | 2 | 1 | 1 | 0 | 0 | 40 | 40 | 0 | 30 | 30 | 0 | 24 | 24 | 0 | 20 | 20 | 0 | 17 | 25 | 43 |
| 2 | 3 | 1 | 1 | 30 | 0 | 41 | 0 | 0 | 30 | 45 | 0 | 24 | 36 | 0 | 20 | 30 | 0 | 17 | 34 | 17 |
| 2 | 4 | 1 | 2 | 0 | 0 | 41 | 20 | 0 | 31 | 0 | 0 | 24 | 48 | 0 | 20 | 40 | 0 | 17 | 42 | 51 |
| 2 | 5 | 1 | 2 | 30 | 0 | 41 | 40 | 0 | 31 | 15 | 0 | 25 | 0 | 0 | 20 | 50 | 0 | 17 | 51 | 26 |
| 2 | 6 | 1 | 3 | 0 | 0 | 42 | 0 | 0 | 31 | 30 | 0 | 25 | 12 | 0 | 21 | 0 | 0 | 18 | 0 | 0 |
| 2 | 7 | 1 | 3 | 30 | 0 | 42 | 20 | 0 | 31 | 45 | 0 | 25 | 24 | 0 | 21 | 10 | 0 | 18 | 8 | 34 |
| 2 | 8 | 1 | 4 | 0 | 0 | 42 | 40 | 0 | 32 | 0 | 0 | 25 | 36 | 0 | 21 | 20 | 0 | 18 | 17 | 9 |
| 2 | 9 | 1 | 4 | 30 | 0 | 43 | 0 | 0 | 32 | 15 | 0 | 25 | 48 | 0 | 21 | 30 | 0 | 18 | 25 | 43 |
| 2 | 10 | 1 | 5 | 0 | 0 | 43 | 20 | 0 | 32 | 30 | 0 | 26 | 0 | 0 | 21 | 40 | 0 | 18 | 34 | 17 |
| 2 | 11 | 1 | 5 | 30 | 0 | 43 | 40 | 0 | 32 | 45 | 0 | 26 | 12 | 0 | 21 | 50 | 0 | 18 | 42 | 51 |
| 2 | 12 | 1 | 6 | 0 | 0 | 44 | 0 | 0 | 33 | 0 | 0 | 26 | 24 | 0 | 22 | 0 | 0 | 18 | 51 | 26 |
| 2 | 13 | 1 | 6 | 30 | 0 | 44 | 20 | 0 | 33 | 15 | 0 | 26 | 36 | 0 | 22 | 10 | 0 | 19 | 0 | 0 |
| 2 | 14 | 1 | 7 | 0 | 0 | 44 | 40 | 0 | 33 | 30 | 0 | 26 | 48 | 0 | 22 | 20 | 0 | 19 | 8 | 34 |
| 2 | 15 | 1 | 7 | 30 | 0 | 45 | 0 | 0 | 33 | 45 | 0 | 27 | 0 | 0 | 22 | 30 | 0 | 19 | 17 | 9 |
| 2 | 16 | 1 | 8 | 0 | 0 | 45 | 20 | 0 | 34 | 0 | 0 | 27 | 12 | 0 | 22 | 40 | 0 | 19 | 25 | 43 |
| 2 | 17 | 1 | 8 | 30 | 0 | 45 | 40 | 0 | 34 | 15 | 0 | 27 | 24 | 0 | 22 | 50 | 0 | 19 | 34 | 17 |
| 2 | 18 | 1 | 9 | 0 | 0 | 46 | 0 | 0 | 34 | 30 | 0 | 27 | 36 | 0 | 23 | 0 | 0 | 19 | 42 | 51 |
| 2 | 19 | 1 | 9 | 30 | 0 | 46 | 20 | 0 | 34 | 45 | 0 | 27 | 48 | 0 | 23 | 10 | 0 | 19 | 51 | 26 |
| 2 | 20 | 1 | 10 | 0 | 0 | 46 | 40 | 0 | 35 | 0 | 0 | 28 | 0 | 0 | 23 | 20 | 0 | 20 | 0 | 0 |
| 2 | 21 | 1 | 10 | 30 | 0 | 47 | 0 | 0 | 35 | 15 | 0 | 28 | 12 | 0 | 23 | 30 | 0 | 20 | 8 | 34 |
| 2 | 22 | 1 | 11 | 0 | 0 | 47 | 20 | 0 | 35 | 30 | 0 | 28 | 24 | 0 | 23 | 40 | 0 | 20 | 17 | 9 |
| 2 | 23 | 1 | 11 | 30 | 0 | 47 | 40 | 0 | 35 | 45 | 0 | 28 | 36 | 0 | 23 | 50 | 0 | 20 | 25 | 43 |
| 2 | 24 | 1 | 12 | 0 | 0 | 48 | 0 | 0 | 36 | 0 | 0 | 28 | 48 | 0 | 24 | 0 | 0 | 20 | 34 | 17 |
| 2 | 25 | 1 | 12 | 30 | 0 | 48 | 20 | 0 | 36 | 15 | 0 | 29 | 0 | 0 | 24 | 10 | 0 | 20 | 42 | 51 |
| 2 | 26 | 1 | 13 | 0 | 0 | 48 | 40 | 0 | 36 | 30 | 0 | 29 | 12 | 0 | 24 | 20 | 0 | 20 | 51 | 26 |
| 2 | 27 | 1 | 13 | 30 | 0 | 49 | 0 | 0 | 36 | 45 | 0 | 29 | 24 | 0 | 24 | 30 | 0 | 21 | 0 | 0 |
| 2 | 28 | 1 | 14 | 0 | 0 | 49 | 20 | 0 | 37 | 0 | 0 | 29 | 36 | 0 | 24 | 40 | 0 | 21 | 8 | 34 |
| 2 | 29 | 1 | 14 | 30 | 0 | 49 | 40 | 0 | 37 | 15 | 0 | 29 | 48 | 0 | 24 | 50 | 0 | 21 | 17 | 9 |
| 2 | 30 | 1 | 15 | 0 | 0 | 50 | 0 | 0 | 37 | 30 | 0 | 30 | 0 | 0 | 25 | 0 | 0 | 21 | 25 | 43 |
| 2 | 31 | 1 | 15 | 30 | 0 | 50 | 20 | 0 | 37 | 45 | 0 | 30 | 12 | 0 | 25 | 10 | 0 | 21 | 34 | 17 |
| 2 | 32 | 1 | 16 | 0 | 0 | 50 | 40 | 0 | 38 | 0 | 0 | 30 | 24 | 0 | 25 | 20 | 0 | 21 | 42 | 51 |
| 2 | 33 | 1 | 16 | 30 | 0 | 51 | 0 | 0 | 38 | 15 | 0 | 30 | 36 | 0 | 25 | 30 | 0 | 21 | 51 | 26 |
| 2 | 34 | 1 | 17 | 0 | 0 | 51 | 20 | 0 | 38 | 30 | 0 | 30 | 48 | 0 | 25 | 40 | 0 | 22 | 0 | 0 |
| 2 | 35 | 1 | 17 | 30 | 0 | 51 | 40 | 0 | 38 | 45 | 0 | 31 | 0 | 0 | 25 | 50 | 0 | 22 | 8 | 34 |
| 2 | 36 | 1 | 18 | 0 | 0 | 52 | 0 | 0 | 39 | 0 | 0 | 31 | 12 | 0 | 26 | 0 | 0 | 22 | 17 | 9 |
| 2 | 37 | 1 | 18 | 30 | 0 | 52 | 20 | 0 | 39 | 15 | 0 | 31 | 24 | 0 | 26 | 10 | 0 | 22 | 25 | 43 |
| 2 | 38 | 1 | 19 | 0 | 0 | 52 | 40 | 0 | 39 | 30 | 0 | 31 | 36 | 0 | 26 | 20 | 0 | 22 | 34 | 17 |
| 2 | 39 | 1 | 19 | 30 | 0 | 53 | 0 | 0 | 39 | 45 | 0 | 31 | 48 | 0 | 26 | 30 | 0 | 22 | 42 | 51 |
| 2 | 40 | 1 | 20 | 0 | 0 | 53 | 20 | 0 | 40 | 0 | 0 | 32 | 0 | 0 | 26 | 40 | 0 | 22 | 51 | 26 |
| 2 | 41 | 1 | 20 | 30 | 0 | 53 | 40 | 0 | 40 | 15 | 0 | 32 | 12 | 0 | 26 | 50 | 0 | 23 | 0 | 0 |
| 2 | 42 | 1 | 21 | 0 | 0 | 54 | 0 | 0 | 40 | 30 | 0 | 32 | 24 | 0 | 27 | 0 | 0 | 23 | 8 | 34 |
| 2 | 43 | 1 | 21 | 30 | 0 | 54 | 20 | 0 | 40 | 45 | 0 | 32 | 36 | 0 | 27 | 10 | 0 | 23 | 17 | 9 |
| 2 | 44 | 1 | 22 | 0 | 0 | 54 | 40 | 0 | 41 | 0 | 0 | 32 | 48 | 0 | 27 | 20 | 0 | 23 | 25 | 43 |
| 2 | 45 | 1 | 22 | 30 | 0 | 55 | 0 | 0 | 41 | 15 | 0 | 33 | 0 | 0 | 27 | 30 | 0 | 23 | 34 | 17 |
| 2 | 46 | 1 | 23 | 0 | 0 | 55 | 20 | 0 | 41 | 30 | 0 | 33 | 12 | 0 | 27 | 40 | 0 | 23 | 42 | 51 |
| 2 | 47 | 1 | 23 | 30 | 0 | 55 | 40 | 0 | 41 | 45 | 0 | 33 | 24 | 0 | 27 | 50 | 0 | 23 | 51 | 26 |
| 2 | 48 | 1 | 24 | 0 | 0 | 56 | 0 | 0 | 42 | 0 | 0 | 33 | 36 | 0 | 28 | 0 | 0 | 24 | 0 | 0 |
| 2 | 49 | 1 | 24 | 30 | 0 | 56 | 20 | 0 | 42 | 15 | 0 | 33 | 48 | 0 | 28 | 10 | 0 | 24 | 8 | 34 |
| 2 | 50 | 1 | 25 | 0 | 0 | 56 | 40 | 0 | 42 | 30 | 0 | 34 | 0 | 0 | 28 | 20 | 0 | 24 | 17 | 9 |
| 2 | 51 | 1 | 25 | 30 | 0 | 57 | 0 | 0 | 42 | 45 | 0 | 34 | 12 | 0 | 28 | 30 | 0 | 24 | 25 | 43 |
| 2 | 52 | 1 | 26 | 0 | 0 | 57 | 20 | 0 | 43 | 0 | 0 | 34 | 24 | 0 | 28 | 40 | 0 | 24 | 34 | 17 |
| 2 | 53 | 1 | 26 | 30 | 0 | 57 | 40 | 0 | 43 | 15 | 0 | 34 | 36 | 0 | 28 | 50 | 0 | 24 | 42 | 51 |
| 2 | 54 | 1 | 27 | 0 | 0 | 58 | 0 | 0 | 43 | 30 | 0 | 34 | 48 | 0 | 29 | 0 | 0 | 24 | 51 | 26 |
| 2 | 55 | 1 | 27 | 30 | 0 | 58 | 20 | 0 | 43 | 45 | 0 | 35 | 0 | 0 | 29 | 10 | 0 | 25 | 0 | 0 |
| 2 | 56 | 1 | 28 | 0 | 0 | 58 | 40 | 0 | 44 | 0 | 0 | 35 | 12 | 0 | 29 | 20 | 0 | 25 | 8 | 34 |
| 2 | 57 | 1 | 28 | 30 | 0 | 59 | 0 | 0 | 44 | 15 | 0 | 35 | 24 | 0 | 29 | 30 | 0 | 25 | 17 | 9 |
| 2 | 58 | 1 | 29 | 0 | 0 | 59 | 20 | 0 | 44 | 30 | 0 | 35 | 36 | 0 | 29 | 40 | 0 | 25 | 25 | 43 |
| 2 | 59 | 1 | 29 | 30 | 0 | 59 | 40 | 0 | 44 | 45 | 0 | 35 | 48 | 0 | 29 | 50 | 0 | 25 | 34 | 17 |
| 3 | 0 | 1 | 30 | 0 | 1 | 0 | 0 | 0 | 45 | 0 | 0 | 36 | 0 | 0 | 30 | 0 | 0 | 25 | 42 | 51 |

| dia | | Sc̃da dies | | | Tercia dies | | | Qrta dies | | | Quinta dies | | | Sexta dies | | | Septima dies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | m | | | | S | m | 2 | | | | S | m | 2 | | | | S | m | 2 | 3 |
| 3 | 1 | 1 | 30 | 30 | 1 | 0 | 20 | 0 | 45 | 15 | 0 | 36 | 12 | 0 | 30 | 10 | 0 | 25 | 51 | 26 |
| 3 | 2 | 1 | 31 | 0 | 1 | 0 | 40 | 0 | 45 | 30 | 0 | 36 | 24 | 0 | 30 | 20 | 0 | 26 | 0 | 0 |
| 3 | 3 | 1 | 31 | 30 | 1 | 1 | 0 | 0 | 45 | 45 | 0 | 36 | 36 | 0 | 30 | 30 | 0 | 26 | 8 | 34 |
| 3 | 4 | 1 | 32 | 0 | 1 | 1 | 20 | 0 | 46 | 0 | 0 | 36 | 48 | 0 | 30 | 40 | 0 | 26 | 17 | 9 |
| 3 | 5 | 1 | 32 | 30 | 1 | 1 | 40 | 0 | 46 | 15 | 0 | 37 | 0 | 0 | 30 | 50 | 0 | 26 | 25 | 43 |
| 3 | 6 | 1 | 33 | 0 | 1 | 2 | 0 | 0 | 46 | 30 | 0 | 37 | 12 | 0 | 31 | 0 | 0 | 26 | 34 | 17 |
| 3 | 7 | 1 | 33 | 30 | 1 | 2 | 20 | 0 | 46 | 45 | 0 | 37 | 24 | 0 | 31 | 10 | 0 | 26 | 42 | 51 |
| 3 | 8 | 1 | 34 | 0 | 1 | 2 | 40 | 0 | 47 | 0 | 0 | 37 | 36 | 0 | 31 | 20 | 0 | 26 | 51 | 26 |
| 3 | 9 | 1 | 34 | 30 | 1 | 3 | 0 | 0 | 47 | 15 | 0 | 37 | 48 | 0 | 31 | 30 | 0 | 27 | 0 | 0 |
| 3 | 10 | 1 | 35 | 0 | 1 | 3 | 20 | 0 | 47 | 30 | 0 | 38 | 0 | 0 | 31 | 40 | 0 | 27 | 8 | 34 |
| 3 | 11 | 1 | 35 | 30 | 1 | 3 | 40 | 0 | 47 | 45 | 0 | 38 | 12 | 0 | 31 | 50 | 0 | 27 | 17 | 9 |
| 3 | 12 | 1 | 36 | 0 | 1 | 4 | 0 | 0 | 48 | 0 | 0 | 38 | 24 | 0 | 32 | 0 | 0 | 27 | 25 | 43 |
| 3 | 13 | 1 | 36 | 30 | 1 | 4 | 20 | 0 | 48 | 15 | 0 | 38 | 36 | 0 | 32 | 10 | 0 | 27 | 34 | 17 |
| 3 | 14 | 1 | 37 | 0 | 1 | 4 | 40 | 0 | 48 | 30 | 0 | 38 | 48 | 0 | 32 | 20 | 0 | 27 | 42 | 51 |
| 3 | 15 | 1 | 37 | 30 | 1 | 5 | 0 | 0 | 48 | 45 | 0 | 39 | 0 | 0 | 32 | 30 | 0 | 27 | 51 | 26 |
| 3 | 16 | 1 | 38 | 0 | 1 | 5 | 20 | 0 | 49 | 0 | 0 | 39 | 12 | 0 | 32 | 40 | 0 | 28 | 0 | 0 |
| 3 | 17 | 1 | 38 | 30 | 1 | 5 | 40 | 0 | 49 | 15 | 0 | 39 | 24 | 0 | 32 | 50 | 0 | 28 | 8 | 34 |
| 3 | 18 | 1 | 39 | 0 | 1 | 6 | 0 | 0 | 49 | 30 | 0 | 39 | 36 | 0 | 33 | 0 | 0 | 28 | 17 | 9 |
| 3 | 19 | 1 | 39 | 30 | 1 | 6 | 20 | 0 | 49 | 45 | 0 | 39 | 48 | 0 | 33 | 10 | 0 | 28 | 25 | 43 |
| 3 | 20 | 1 | 40 | 0 | 1 | 6 | 40 | 0 | 50 | 0 | 0 | 40 | 0 | 0 | 33 | 20 | 0 | 28 | 34 | 17 |
| 3 | 21 | 1 | 40 | 30 | 1 | 7 | 0 | 0 | 50 | 15 | 0 | 40 | 12 | 0 | 33 | 30 | 0 | 28 | 42 | 51 |
| 3 | 22 | 1 | 41 | 0 | 1 | 7 | 20 | 0 | 50 | 30 | 0 | 40 | 24 | 0 | 33 | 40 | 0 | 28 | 51 | 26 |
| 3 | 23 | 1 | 41 | 30 | 1 | 7 | 40 | 0 | 50 | 45 | 0 | 40 | 36 | 0 | 33 | 50 | 0 | 29 | 0 | 0 |
| 3 | 24 | 1 | 42 | 0 | 1 | 8 | 0 | 0 | 51 | 0 | 0 | 40 | 48 | 0 | 34 | 0 | 0 | 29 | 8 | 34 |
| 3 | 25 | 1 | 42 | 30 | 1 | 8 | 20 | 0 | 51 | 15 | 0 | 41 | 0 | 0 | 34 | 10 | 0 | 29 | 17 | 9 |
| 3 | 26 | 1 | 43 | 0 | 1 | 8 | 40 | 0 | 51 | 30 | 0 | 41 | 12 | 0 | 34 | 20 | 0 | 29 | 25 | 43 |
| 3 | 27 | 1 | 43 | 30 | 1 | 9 | 0 | 0 | 51 | 45 | 0 | 41 | 24 | 0 | 34 | 30 | 0 | 29 | 34 | 17 |
| 3 | 28 | 1 | 44 | 0 | 1 | 9 | 20 | 0 | 52 | 0 | 0 | 41 | 36 | 0 | 34 | 40 | 0 | 29 | 42 | 51 |
| 3 | 29 | 1 | 44 | 30 | 1 | 9 | 40 | 0 | 52 | 15 | 0 | 41 | 48 | 0 | 34 | 50 | 0 | 29 | 51 | 26 |
| 3 | 30 | 1 | 45 | 0 | 1 | 10 | 0 | 0 | 52 | 30 | 0 | 42 | 0 | 0 | 35 | 0 | 0 | 30 | 0 | 0 |
| 3 | 31 | 1 | 45 | 30 | 1 | 10 | 20 | 0 | 52 | 45 | 0 | 42 | 12 | 0 | 35 | 10 | 0 | 30 | 8 | 34 |
| 3 | 32 | 1 | 46 | 0 | 1 | 10 | 40 | 0 | 53 | 0 | 0 | 42 | 24 | 0 | 35 | 20 | 0 | 30 | 17 | 9 |
| 3 | 33 | 1 | 46 | 30 | 1 | 11 | 0 | 0 | 53 | 15 | 0 | 42 | 36 | 0 | 35 | 30 | 0 | 30 | 25 | 43 |
| 3 | 34 | 1 | 47 | 0 | 1 | 11 | 20 | 0 | 53 | 30 | 0 | 42 | 48 | 0 | 35 | 40 | 0 | 30 | 34 | 17 |
| 3 | 35 | 1 | 47 | 30 | 1 | 11 | 40 | 0 | 53 | 45 | 0 | 43 | 0 | 0 | 35 | 50 | 0 | 30 | 42 | 51 |
| 3 | 36 | 1 | 48 | 0 | 1 | 12 | 0 | 0 | 54 | 0 | 0 | 43 | 12 | 0 | 36 | 0 | 0 | 30 | 51 | 26 |
| 3 | 37 | 1 | 48 | 30 | 1 | 12 | 20 | 0 | 54 | 15 | 0 | 43 | 24 | 0 | 36 | 10 | 0 | 31 | 0 | 0 |
| 3 | 38 | 1 | 49 | 0 | 1 | 12 | 40 | 0 | 54 | 30 | 0 | 43 | 36 | 0 | 36 | 20 | 0 | 31 | 8 | 34 |
| 3 | 39 | 1 | 49 | 30 | 1 | 13 | 0 | 0 | 54 | 45 | 0 | 43 | 48 | 0 | 36 | 30 | 0 | 31 | 17 | 9 |
| 3 | 40 | 1 | 50 | 0 | 1 | 13 | 20 | 0 | 55 | 0 | 0 | 44 | 0 | 0 | 36 | 40 | 0 | 31 | 25 | 43 |
| 3 | 41 | 1 | 50 | 30 | 1 | 13 | 40 | 0 | 55 | 15 | 0 | 44 | 12 | 0 | 36 | 50 | 0 | 31 | 34 | 17 |
| 3 | 42 | 1 | 51 | 0 | 1 | 14 | 0 | 0 | 55 | 30 | 0 | 44 | 24 | 0 | 37 | 0 | 0 | 31 | 42 | 51 |
| 3 | 43 | 1 | 51 | 30 | 1 | 14 | 20 | 0 | 55 | 45 | 0 | 44 | 36 | 0 | 37 | 10 | 0 | 31 | 51 | 26 |
| 3 | 44 | 1 | 52 | 0 | 1 | 14 | 40 | 0 | 56 | 0 | 0 | 44 | 48 | 0 | 37 | 20 | 0 | 32 | 0 | 0 |
| 3 | 45 | 1 | 52 | 30 | 1 | 15 | 0 | 0 | 56 | 15 | 0 | 45 | 0 | 0 | 37 | 30 | 0 | 32 | 8 | 34 |
| 3 | 46 | 1 | 53 | 0 | 1 | 15 | 20 | 0 | 56 | 30 | 0 | 45 | 12 | 0 | 37 | 40 | 0 | 32 | 17 | 9 |
| 3 | 47 | 1 | 53 | 30 | 1 | 15 | 40 | 0 | 56 | 45 | 0 | 45 | 24 | 0 | 37 | 50 | 0 | 32 | 25 | 43 |
| 3 | 48 | 1 | 54 | 0 | 1 | 16 | 0 | 0 | 57 | 0 | 0 | 45 | 36 | 0 | 38 | 0 | 0 | 32 | 34 | 17 |
| 3 | 49 | 1 | 54 | 30 | 1 | 16 | 20 | 0 | 57 | 15 | 0 | 45 | 48 | 0 | 38 | 10 | 0 | 32 | 42 | 51 |
| 3 | 50 | 1 | 55 | 0 | 1 | 16 | 40 | 0 | 57 | 30 | 0 | 46 | 0 | 0 | 38 | 20 | 0 | 32 | 51 | 26 |
| 3 | 51 | 1 | 55 | 30 | 1 | 17 | 0 | 0 | 57 | 45 | 0 | 46 | 12 | 0 | 38 | 30 | 0 | 33 | 0 | 0 |
| 3 | 52 | 1 | 56 | 0 | 1 | 17 | 20 | 0 | 58 | 0 | 0 | 46 | 24 | 0 | 38 | 40 | 0 | 33 | 8 | 34 |
| 3 | 53 | 1 | 56 | 30 | 1 | 17 | 40 | 0 | 58 | 15 | 0 | 46 | 36 | 0 | 38 | 50 | 0 | 33 | 17 | 9 |
| 3 | 54 | 1 | 57 | 0 | 1 | 18 | 0 | 0 | 58 | 30 | 0 | 46 | 48 | 0 | 39 | 0 | 0 | 33 | 25 | 43 |
| 3 | 55 | 1 | 57 | 30 | 1 | 18 | 20 | 0 | 58 | 45 | 0 | 47 | 0 | 0 | 39 | 10 | 0 | 33 | 34 | 17 |
| 3 | 56 | 1 | 58 | 0 | 1 | 18 | 40 | 0 | 59 | 0 | 0 | 47 | 12 | 0 | 39 | 20 | 0 | 33 | 42 | 51 |
| 3 | 57 | 1 | 58 | 30 | 1 | 19 | 0 | 0 | 59 | 15 | 0 | 47 | 24 | 0 | 39 | 30 | 0 | 33 | 51 | 26 |
| 3 | 58 | 1 | 59 | 0 | 1 | 19 | 20 | 0 | 59 | 30 | 0 | 47 | 36 | 0 | 39 | 40 | 0 | 34 | 0 | 0 |
| 3 | 59 | 1 | 59 | 30 | 1 | 19 | 40 | 0 | 59 | 45 | 0 | 47 | 48 | 0 | 39 | 50 | 0 | 34 | 8 | 34 |
| 4 | 0 | 1 | 0 | 0 | 1 | 20 | 0 | 1 | 0 | 0 | 0 | 48 | 0 | 0 | 40 | 0 | 0 | 34 | 17 | 9 |

# Residue partes precedentium tabularū pro diebus

| S | m | Secunda dies S | m | 2 | Tertia dies S | m | 2 | Quarta dies S | m | 2 | Quinta dies S | m | 2 | Sexta dies S | m | 2 | Septima dies S | m | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 1 | 2 | 0 | 30 | 1 | 20 | 20 | 1 | 0 | 15 | 0 | 48 | 12 | 0 | 40 | 10 | 0 | 34 | 25 | 43 |
| 4 | 2 | 2 | 1 | 0 | 1 | 20 | 40 | 1 | 0 | 30 | 0 | 48 | 24 | 0 | 40 | 20 | 0 | 34 | 34 | 17 |
| 4 | 3 | 2 | 1 | 30 | 1 | 21 | 0 | 1 | 0 | 45 | 0 | 48 | 36 | 0 | 40 | 30 | 0 | 34 | 42 | 51 |
| 4 | 4 | 2 | 2 | 0 | 1 | 21 | 20 | 1 | 1 | 0 | 0 | 48 | 48 | 0 | 40 | 40 | 0 | 34 | 51 | 26 |
| 4 | 5 | 2 | 2 | 30 | 1 | 21 | 40 | 1 | 1 | 15 | 0 | 49 | 0 | 0 | 40 | 50 | 0 | 35 | 0 | 0 |
| 4 | 6 | 2 | 3 | 0 | 1 | 22 | 0 | 1 | 1 | 30 | 0 | 49 | 12 | 0 | 41 | 0 | 0 | 35 | 8 | 34 |
| 4 | 7 | 2 | 3 | 30 | 1 | 22 | 20 | 1 | 1 | 45 | 0 | 49 | 24 | 0 | 41 | 10 | 0 | 35 | 17 | 9 |
| 4 | 8 | 2 | 4 | 0 | 1 | 22 | 40 | 1 | 2 | 0 | 0 | 49 | 36 | 0 | 41 | 20 | 0 | 35 | 25 | 43 |
| 4 | 9 | 2 | 4 | 30 | 1 | 23 | 0 | 1 | 2 | 15 | 0 | 49 | 48 | 0 | 41 | 30 | 0 | 35 | 34 | 17 |
| 4 | 10 | 2 | 5 | 0 | 1 | 23 | 20 | 1 | 2 | 30 | 0 | 50 | 0 | 0 | 41 | 40 | 0 | 35 | 42 | 51 |
| 4 | 11 | 2 | 5 | 30 | 1 | 23 | 40 | 1 | 2 | 45 | 0 | 50 | 12 | 0 | 41 | 50 | 0 | 35 | 51 | 26 |
| 4 | 12 | 2 | 6 | 0 | 1 | 24 | 0 | 1 | 3 | 0 | 0 | 50 | 24 | 0 | 42 | 0 | 0 | 36 | 0 | 0 |
| 4 | 13 | 2 | 6 | 30 | 1 | 24 | 20 | 1 | 3 | 15 | 0 | 50 | 36 | 0 | 42 | 10 | 0 | 36 | 8 | 34 |
| 4 | 14 | 2 | 7 | 0 | 1 | 24 | 40 | 1 | 3 | 30 | 0 | 50 | 48 | 0 | 42 | 20 | 0 | 36 | 17 | 9 |
| 4 | 15 | 2 | 7 | 30 | 1 | 25 | 0 | 1 | 3 | 45 | 0 | 51 | 0 | 0 | 42 | 30 | 0 | 36 | 25 | 43 |
| 4 | 16 | 2 | 8 | 0 | 1 | 25 | 20 | 1 | 4 | 0 | 0 | 51 | 12 | 0 | 42 | 40 | 0 | 36 | 34 | 17 |
| 4 | 17 | 2 | 8 | 30 | 1 | 25 | 40 | 1 | 4 | 15 | 0 | 51 | 24 | 0 | 42 | 50 | 0 | 36 | 42 | 51 |
| 4 | 18 | 2 | 9 | 0 | 1 | 26 | 0 | 1 | 4 | 30 | 0 | 51 | 36 | 0 | 43 | 0 | 0 | 36 | 51 | 26 |
| 4 | 19 | 2 | 9 | 30 | 1 | 26 | 20 | 1 | 4 | 45 | 0 | 51 | 48 | 0 | 43 | 10 | 0 | 37 | 0 | 0 |
| 4 | 20 | 2 | 10 | 0 | 1 | 26 | 40 | 1 | 5 | 0 | 0 | 52 | 0 | 0 | 43 | 20 | 0 | 37 | 8 | 34 |
| 4 | 21 | 2 | 10 | 30 | 1 | 27 | 0 | 1 | 5 | 15 | 0 | 52 | 12 | 0 | 43 | 30 | 0 | 37 | 17 | 9 |
| 4 | 22 | 2 | 11 | 0 | 1 | 27 | 20 | 1 | 5 | 30 | 0 | 52 | 24 | 0 | 43 | 40 | 0 | 37 | 25 | 43 |
| 4 | 23 | 2 | 11 | 30 | 1 | 27 | 40 | 1 | 5 | 45 | 0 | 52 | 36 | 0 | 43 | 50 | 0 | 37 | 34 | 17 |
| 4 | 24 | 2 | 12 | 0 | 1 | 28 | 0 | 1 | 6 | 0 | 0 | 52 | 48 | 0 | 44 | 0 | 0 | 37 | 42 | 51 |
| 4 | 25 | 2 | 12 | 30 | 1 | 28 | 20 | 1 | 6 | 15 | 0 | 53 | 0 | 0 | 44 | 10 | 0 | 37 | 51 | 26 |
| 4 | 26 | 2 | 13 | 0 | 1 | 28 | 40 | 1 | 6 | 30 | 0 | 53 | 12 | 0 | 44 | 20 | 0 | 38 | 0 | 0 |
| 4 | 27 | 2 | 13 | 30 | 1 | 29 | 0 | 1 | 6 | 45 | 0 | 53 | 24 | 0 | 44 | 30 | 0 | 38 | 8 | 34 |
| 4 | 28 | 2 | 14 | 0 | 1 | 29 | 20 | 1 | 7 | 0 | 0 | 53 | 36 | 0 | 44 | 40 | 0 | 38 | 17 | 9 |
| 4 | 29 | 2 | 14 | 30 | 1 | 29 | 40 | 1 | 7 | 15 | 0 | 53 | 48 | 0 | 44 | 50 | 0 | 38 | 25 | 43 |
| 4 | 30 | 2 | 15 | 0 | 1 | 30 | 0 | 1 | 7 | 30 | 0 | 54 | 0 | 0 | 45 | 0 | 0 | 38 | 34 | 17 |
| 4 | 31 | 2 | 15 | 30 | 1 | 30 | 20 | 1 | 7 | 45 | 0 | 54 | 12 | 0 | 45 | 10 | 0 | 38 | 42 | 51 |
| 4 | 32 | 2 | 16 | 0 | 1 | 30 | 40 | 1 | 8 | 0 | 0 | 54 | 24 | 0 | 45 | 20 | 0 | 38 | 51 | 26 |
| 4 | 33 | 2 | 16 | 30 | 1 | 31 | 0 | 1 | 8 | 15 | 0 | 54 | 36 | 0 | 45 | 30 | 0 | 39 | 0 | 0 |
| 4 | 34 | 2 | 17 | 0 | 1 | 31 | 20 | 1 | 8 | 30 | 0 | 54 | 48 | 0 | 45 | 40 | 0 | 39 | 8 | 34 |
| 4 | 35 | 2 | 17 | 30 | 1 | 31 | 40 | 1 | 8 | 45 | 0 | 55 | 0 | 0 | 45 | 50 | 0 | 39 | 17 | 9 |
| 4 | 36 | 2 | 18 | 0 | 1 | 32 | 0 | 1 | 9 | 0 | 0 | 55 | 12 | 0 | 46 | 0 | 0 | 39 | 25 | 43 |
| 4 | 37 | 2 | 18 | 30 | 1 | 32 | 20 | 1 | 9 | 15 | 0 | 55 | 24 | 0 | 46 | 10 | 0 | 39 | 34 | 17 |
| 4 | 38 | 2 | 19 | 0 | 1 | 32 | 40 | 1 | 9 | 30 | 0 | 55 | 36 | 0 | 46 | 20 | 0 | 39 | 42 | 51 |
| 4 | 39 | 2 | 19 | 30 | 1 | 33 | 0 | 1 | 9 | 45 | 0 | 55 | 48 | 0 | 46 | 30 | 0 | 39 | 51 | 26 |
| 4 | 40 | 2 | 20 | 0 | 1 | 33 | 20 | 1 | 10 | 0 | 0 | 56 | 0 | 0 | 46 | 40 | 0 | 40 | 0 | 0 |
| 4 | 41 | 2 | 20 | 30 | 1 | 33 | 40 | 1 | 10 | 15 | 0 | 56 | 12 | 0 | 46 | 50 | 0 | 40 | 8 | 34 |
| 4 | 42 | 2 | 21 | 0 | 1 | 34 | 0 | 1 | 10 | 30 | 0 | 56 | 24 | 0 | 47 | 0 | 0 | 40 | 17 | 9 |
| 4 | 43 | 2 | 21 | 30 | 1 | 34 | 20 | 1 | 10 | 45 | 0 | 56 | 36 | 0 | 47 | 10 | 0 | 40 | 25 | 43 |
| 4 | 44 | 2 | 22 | 0 | 1 | 34 | 40 | 1 | 11 | 0 | 0 | 56 | 48 | 0 | 47 | 20 | 0 | 40 | 34 | 17 |
| 4 | 45 | 2 | 22 | 30 | 1 | 35 | 0 | 1 | 11 | 15 | 0 | 57 | 0 | 0 | 47 | 30 | 0 | 40 | 42 | 51 |
| 4 | 46 | 2 | 23 | 0 | 1 | 35 | 20 | 1 | 11 | 30 | 0 | 57 | 12 | 0 | 47 | 40 | 0 | 40 | 51 | 26 |
| 4 | 47 | 2 | 23 | 30 | 1 | 35 | 40 | 1 | 11 | 45 | 0 | 57 | 24 | 0 | 47 | 50 | 0 | 41 | 0 | 0 |
| 4 | 48 | 2 | 24 | 0 | 1 | 36 | 0 | 1 | 12 | 0 | 0 | 57 | 36 | 0 | 48 | 0 | 0 | 41 | 8 | 34 |
| 4 | 49 | 2 | 24 | 30 | 1 | 36 | 20 | 1 | 12 | 15 | 0 | 57 | 48 | 0 | 48 | 10 | 0 | 41 | 17 | 9 |
| 4 | 50 | 2 | 25 | 0 | 1 | 36 | 40 | 1 | 12 | 30 | 0 | 58 | 0 | 0 | 48 | 20 | 0 | 41 | 25 | 43 |
| 4 | 51 | 2 | 25 | 30 | 1 | 37 | 0 | 1 | 12 | 45 | 0 | 58 | 12 | 0 | 48 | 30 | 0 | 41 | 34 | 17 |
| 4 | 52 | 2 | 26 | 0 | 1 | 37 | 20 | 1 | 13 | 0 | 0 | 58 | 24 | 0 | 48 | 40 | 0 | 41 | 42 | 51 |
| 4 | 53 | 2 | 26 | 30 | 1 | 37 | 40 | 1 | 13 | 15 | 0 | 58 | 36 | 0 | 48 | 50 | 0 | 41 | 51 | 26 |
| 4 | 54 | 2 | 27 | 0 | 1 | 38 | 0 | 1 | 13 | 30 | 0 | 58 | 48 | 0 | 49 | 0 | 0 | 42 | 0 | 0 |
| 4 | 55 | 2 | 27 | 30 | 1 | 38 | 20 | 1 | 13 | 45 | 0 | 59 | 0 | 0 | 49 | 10 | 0 | 42 | 8 | 34 |
| 4 | 56 | 2 | 28 | 0 | 1 | 38 | 40 | 1 | 14 | 0 | 0 | 59 | 12 | 0 | 49 | 20 | 0 | 42 | 17 | 9 |
| 4 | 57 | 2 | 28 | 30 | 1 | 39 | 0 | 1 | 14 | 15 | 0 | 59 | 24 | 0 | 49 | 30 | 0 | 42 | 25 | 43 |
| 4 | 58 | 2 | 29 | 0 | 1 | 39 | 20 | 1 | 14 | 30 | 0 | 59 | 36 | 0 | 49 | 40 | 0 | 42 | 34 | 17 |
| 4 | 59 | 2 | 29 | 30 | 1 | 39 | 40 | 1 | 14 | 45 | 0 | 59 | 48 | 0 | 49 | 50 | 0 | 42 | 42 | 51 |
| 5 | 0 | 2 | 30 | 0 | 1 | 40 | 0 | 1 | 15 | 0 | 1 | 0 | 0 | 0 | 50 | 0 | 0 | 42 | 51 | 26 |
| 5 | 1 | 2 | 30 | 30 | 1 | 40 | 20 | 1 | 15 | 15 | 1 | 0 | 12 | 0 | 50 | 10 | 0 | 43 | 0 | 0 |
| 5 | 2 | 2 | 31 | 0 | 1 | 40 | 40 | 1 | 15 | 30 | 1 | 0 | 24 | 0 | 50 | 20 | 0 | 43 | 8 | 34 |
| 5 | 3 | 2 | 31 | 30 | 1 | 41 | 0 | 1 | 15 | 45 | 1 | 0 | 36 | 0 | 50 | 30 | 0 | 43 | 17 | 9 |
| 5 | 4 | 2 | 32 | 0 | 1 | 41 | 20 | 1 | 16 | 0 | 1 | 0 | 48 | 0 | 50 | 40 | 0 | 43 | 25 | 43 |
| 5 | 5 | 2 | 32 | 30 | 1 | 41 | 40 | 1 | 16 | 15 | 1 | 1 | 0 | 0 | 50 | 50 | 0 | 43 | 34 | 17 |
| 5 | 6 | 2 | 33 | 0 | 1 | 42 | 0 | 1 | 16 | 30 | 1 | 1 | 12 | 0 | 51 | 0 | 0 | 43 | 42 | 51 |
| 5 | 7 | 2 | 33 | 30 | 1 | 42 | 20 | 1 | 16 | 45 | 1 | 1 | 24 | 0 | 51 | 10 | 0 | 43 | 51 | 26 |
| 5 | 8 | 2 | 34 | 0 | 1 | 42 | 40 | 1 | 17 | 0 | 1 | 1 | 36 | 0 | 51 | 20 | 0 | 44 | 0 | 0 |
| 5 | 9 | 2 | 34 | 30 | 1 | 43 | 0 | 1 | 17 | 15 | 1 | 1 | 48 | 0 | 51 | 30 | 0 | 44 | 8 | 34 |
| 5 | 10 | 2 | 35 | 0 | 1 | 43 | 20 | 1 | 17 | 30 | 1 | 2 | 0 | 0 | 51 | 40 | 0 | 44 | 17 | 9 |
| 5 | 11 | 2 | 35 | 30 | 1 | 43 | 40 | 1 | 17 | 45 | 1 | 2 | 12 | 0 | 51 | 50 | 0 | 44 | 25 | 43 |
| 5 | 12 | 2 | 36 | 0 | 1 | 44 | 0 | 1 | 18 | 0 | 1 | 2 | 24 | 0 | 52 | 0 | 0 | 44 | 34 | 17 |
| 5 | 13 | 2 | 36 | 30 | 1 | 44 | 20 | 1 | 18 | 15 | 1 | 2 | 36 | 0 | 52 | 10 | 0 | 44 | 42 | 51 |
| 5 | 14 | 2 | 37 | 0 | 1 | 44 | 40 | 1 | 18 | 30 | 1 | 2 | 48 | 0 | 52 | 20 | 0 | 44 | 51 | 26 |
| 5 | 15 | 2 | 37 | 30 | 1 | 45 | 0 | 1 | 18 | 45 | 1 | 3 | 0 | 0 | 52 | 30 | 0 | 45 | 0 | 0 |
| 5 | 16 | 2 | 38 | 0 | 1 | 45 | 20 | 1 | 19 | 0 | 1 | 3 | 12 | 0 | 52 | 40 | 0 | 45 | 8 | 34 |
| 5 | 17 | 2 | 38 | 30 | 1 | 45 | 40 | 1 | 19 | 15 | 1 | 3 | 24 | 0 | 52 | 50 | 0 | 45 | 17 | 9 |
| 5 | 18 | 2 | 39 | 0 | 1 | 46 | 0 | 1 | 19 | 30 | 1 | 3 | 36 | 0 | 53 | 0 | 0 | 45 | 25 | 43 |
| 5 | 19 | 2 | 39 | 30 | 1 | 46 | 20 | 1 | 19 | 45 | 1 | 3 | 48 | 0 | 53 | 10 | 0 | 45 | 34 | 17 |
| 5 | 20 | 2 | 40 | 0 | 1 | 46 | 40 | 1 | 20 | 0 | 1 | 4 | 0 | 0 | 53 | 20 | 0 | 45 | 42 | 51 |
| 5 | 21 | 2 | 40 | 30 | 1 | 47 | 0 | 1 | 20 | 15 | 1 | 4 | 12 | 0 | 53 | 30 | 0 | 45 | 51 | 26 |
| 5 | 22 | 2 | 41 | 0 | 1 | 47 | 20 | 1 | 20 | 30 | 1 | 4 | 24 | 0 | 53 | 40 | 0 | 46 | 0 | 0 |
| 5 | 23 | 2 | 41 | 30 | 1 | 47 | 40 | 1 | 20 | 45 | 1 | 4 | 36 | 0 | 53 | 50 | 0 | 46 | 8 | 34 |
| 5 | 24 | 2 | 42 | 0 | 1 | 48 | 0 | 1 | 21 | 0 | 1 | 4 | 48 | 0 | 54 | 0 | 0 | 46 | 17 | 9 |
| 5 | 25 | 2 | 42 | 30 | 1 | 48 | 20 | 1 | 21 | 15 | 1 | 5 | 0 | 0 | 54 | 10 | 0 | 46 | 25 | 43 |
| 5 | 26 | 2 | 43 | 0 | 1 | 48 | 40 | 1 | 21 | 30 | 1 | 5 | 12 | 0 | 54 | 20 | 0 | 46 | 34 | 17 |
| 5 | 27 | 2 | 43 | 30 | 1 | 49 | 0 | 1 | 21 | 45 | 1 | 5 | 24 | 0 | 54 | 30 | 0 | 46 | 42 | 51 |
| 5 | 28 | 2 | 44 | 0 | 1 | 49 | 20 | 1 | 22 | 0 | 1 | 5 | 36 | 0 | 54 | 40 | 0 | 46 | 51 | 26 |
| 5 | 29 | 2 | 44 | 30 | 1 | 49 | 40 | 1 | 22 | 15 | 1 | 5 | 48 | 0 | 54 | 50 | 0 | 47 | 0 | 0 |
| 5 | 30 | 2 | 45 | 0 | 1 | 50 | 0 | 1 | 22 | 30 | 1 | 6 | 0 | 0 | 55 | 0 | 0 | 47 | 8 | 34 |
| 5 | 31 | 2 | 45 | 30 | 1 | 50 | 20 | 1 | 22 | 45 | 1 | 6 | 12 | 0 | 55 | 10 | 0 | 47 | 17 | 9 |
| 5 | 32 | 2 | 46 | 0 | 1 | 50 | 40 | 1 | 23 | 0 | 1 | 6 | 24 | 0 | 55 | 20 | 0 | 47 | 25 | 43 |
| 5 | 33 | 2 | 46 | 30 | 1 | 51 | 0 | 1 | 23 | 15 | 1 | 6 | 36 | 0 | 55 | 30 | 0 | 47 | 34 | 17 |
| 5 | 34 | 2 | 47 | 0 | 1 | 51 | 20 | 1 | 23 | 30 | 1 | 6 | 48 | 0 | 55 | 40 | 0 | 47 | 42 | 51 |
| 5 | 35 | 2 | 47 | 30 | 1 | 51 | 40 | 1 | 23 | 45 | 1 | 7 | 0 | 0 | 55 | 50 | 0 | 47 | 51 | 26 |
| 5 | 36 | 2 | 48 | 0 | 1 | 52 | 0 | 1 | 24 | 0 | 1 | 7 | 12 | 0 | 56 | 0 | 0 | 48 | 0 | 0 |
| 5 | 37 | 2 | 48 | 30 | 1 | 52 | 20 | 1 | 24 | 15 | 1 | 7 | 24 | 0 | 56 | 10 | 0 | 48 | 8 | 34 |
| 5 | 38 | 2 | 49 | 0 | 1 | 52 | 40 | 1 | 24 | 30 | 1 | 7 | 36 | 0 | 56 | 20 | 0 | 48 | 17 | 9 |
| 5 | 39 | 2 | 49 | 30 | 1 | 53 | 0 | 1 | 24 | 45 | 1 | 7 | 48 | 0 | 56 | 30 | 0 | 48 | 25 | 43 |
| 5 | 40 | 2 | 50 | 0 | 1 | 53 | 20 | 1 | 25 | 0 | 1 | 8 | 0 | 0 | 56 | 40 | 0 | 48 | 34 | 17 |
| 5 | 41 | 2 | 50 | 30 | 1 | 53 | 40 | 1 | 25 | 15 | 1 | 8 | 12 | 0 | 56 | 50 | 0 | 48 | 42 | 51 |
| 5 | 42 | 2 | 51 | 0 | 1 | 54 | 0 | 1 | 25 | 30 | 1 | 8 | 24 | 0 | 57 | 0 | 0 | 48 | 51 | 26 |
| 5 | 43 | 2 | 51 | 30 | 1 | 54 | 20 | 1 | 25 | 45 | 1 | 8 | 36 | 0 | 57 | 10 | 0 | 49 | 0 | 0 |
| 5 | 44 | 2 | 52 | 0 | 1 | 54 | 40 | 1 | 26 | 0 | 1 | 8 | 48 | 0 | 57 | 20 | 0 | 49 | 8 | 34 |
| 5 | 45 | 2 | 52 | 30 | 1 | 55 | 0 | 1 | 26 | 15 | 1 | 9 | 0 | 0 | 57 | 30 | 0 | 49 | 17 | 9 |
| 5 | 46 | 2 | 53 | 0 | 1 | 55 | 20 | 1 | 26 | 30 | 1 | 9 | 12 | 0 | 57 | 40 | 0 | 49 | 25 | 43 |
| 5 | 47 | 2 | 53 | 30 | 1 | 55 | 40 | 1 | 26 | 45 | 1 | 9 | 24 | 0 | 57 | 50 | 0 | 49 | 34 | 17 |
| 5 | 48 | 2 | 54 | 0 | 1 | 56 | 0 | 1 | 27 | 0 | 1 | 9 | 36 | 0 | 58 | 0 | 0 | 49 | 42 | 51 |
| 5 | 49 | 2 | 54 | 30 | 1 | 56 | 20 | 1 | 27 | 15 | 1 | 9 | 48 | 0 | 58 | 10 | 0 | 49 | 51 | 26 |
| 5 | 50 | 2 | 55 | 0 | 1 | 56 | 40 | 1 | 27 | 30 | 1 | 10 | 0 | 0 | 58 | 20 | 0 | 50 | 0 | 0 |
| 5 | 51 | 2 | 55 | 30 | 1 | 57 | 0 | 1 | 27 | 45 | 1 | 10 | 12 | 0 | 58 | 30 | 0 | 50 | 8 | 34 |
| 5 | 52 | 2 | 56 | 0 | 1 | 57 | 20 | 1 | 28 | 0 | 1 | 10 | 24 | 0 | 58 | 40 | 0 | 50 | 17 | 9 |
| 5 | 53 | 2 | 56 | 30 | 1 | 57 | 40 | 1 | 28 | 15 | 1 | 10 | 36 | 0 | 58 | 50 | 0 | 50 | 25 | 43 |
| 5 | 54 | 2 | 57 | 0 | 1 | 58 | 0 | 1 | 28 | 30 | 1 | 10 | 48 | 0 | 59 | 0 | 0 | 50 | 34 | 17 |
| 5 | 55 | 2 | 57 | 30 | 1 | 58 | 20 | 1 | 28 | 45 | 1 | 11 | 0 | 0 | 59 | 10 | 0 | 50 | 42 | 51 |
| 5 | 56 | 2 | 58 | 0 | 1 | 58 | 40 | 1 | 29 | 0 | 1 | 11 | 12 | 0 | 59 | 20 | 0 | 50 | 51 | 26 |
| 5 | 57 | 2 | 58 | 30 | 1 | 59 | 0 | 1 | 29 | 15 | 1 | 11 | 24 | 0 | 59 | 30 | 0 | 51 | 0 | 0 |
| 5 | 58 | 2 | 59 | 0 | 1 | 59 | 20 | 1 | 29 | 30 | 1 | 11 | 36 | 0 | 59 | 40 | 0 | 51 | 8 | 34 |
| 5 | 59 | 2 | 59 | 30 | 1 | 59 | 40 | 1 | 29 | 45 | 1 | 11 | 48 | 0 | 59 | 50 | 0 | 51 | 17 | 9 |
| 6 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 1 | 30 | 0 | 1 | 12 | 0 | 1 | 0 | 0 | 0 | 51 | 25 | 43 |

# intermedys in almanach faciendis :~

| S | m | Secunda dies S | m | 2 | Tertia dies S | m | 2 | Quarta dies S | m | 2 | Quinta dies S | m | 2 | Sexta dies S | m | 2 | Septima dies S | m | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1 | 3 | 0 | 30 | 2 | 0 | 20 | 1 | 30 | 15 | 1 | 12 | 12 | 1 | 0 | 10 | 0 | 51 | 34 | 17 |
| 6 | 2 | 3 | 1 | 0 | 2 | 0 | 40 | 1 | 30 | 30 | 1 | 12 | 24 | 1 | 0 | 20 | 0 | 51 | 42 | 51 |
| 6 | 3 | 3 | 1 | 30 | 2 | 1 | 0 | 1 | 30 | 45 | 1 | 12 | 36 | 1 | 0 | 30 | 0 | 51 | 51 | 26 |
| 6 | 4 | 3 | 2 | 0 | 2 | 1 | 20 | 1 | 31 | 0 | 1 | 12 | 48 | 1 | 0 | 40 | 0 | 52 | 0 | 0 |
| 6 | 5 | 3 | 2 | 30 | 2 | 1 | 40 | 1 | 31 | 15 | 1 | 13 | 0 | 1 | 0 | 50 | 0 | 52 | 8 | 34 |
| 6 | 6 | 3 | 3 | 0 | 2 | 2 | 0 | 1 | 31 | 30 | 1 | 13 | 12 | 1 | 1 | 0 | 0 | 52 | 17 | 9 |
| 6 | 7 | 3 | 3 | 30 | 2 | 2 | 20 | 1 | 31 | 45 | 1 | 13 | 24 | 1 | 1 | 10 | 0 | 52 | 25 | 43 |
| 6 | 8 | 3 | 4 | 0 | 2 | 2 | 40 | 1 | 32 | 0 | 1 | 13 | 36 | 1 | 1 | 20 | 0 | 52 | 34 | 17 |
| 6 | 9 | 3 | 4 | 30 | 2 | 3 | 0 | 1 | 32 | 15 | 1 | 13 | 48 | 1 | 1 | 30 | 0 | 52 | 42 | 51 |
| 6 | 10 | 3 | 5 | 0 | 2 | 3 | 20 | 1 | 32 | 30 | 1 | 14 | 0 | 1 | 1 | 40 | 0 | 52 | 51 | 26 |
| 6 | 11 | 3 | 5 | 30 | 2 | 3 | 40 | 1 | 32 | 45 | 1 | 14 | 12 | 1 | 1 | 50 | 0 | 53 | 0 | 0 |
| 6 | 12 | 3 | 6 | 0 | 2 | 4 | 0 | 1 | 33 | 0 | 1 | 14 | 24 | 1 | 2 | 0 | 0 | 53 | 8 | 34 |
| 6 | 13 | 3 | 6 | 30 | 2 | 4 | 20 | 1 | 33 | 15 | 1 | 14 | 36 | 1 | 2 | 10 | 0 | 53 | 17 | 9 |
| 6 | 14 | 3 | 7 | 0 | 2 | 4 | 40 | 1 | 33 | 30 | 1 | 14 | 48 | 1 | 2 | 20 | 0 | 53 | 25 | 43 |
| 6 | 15 | 3 | 7 | 30 | 2 | 5 | 0 | 1 | 33 | 45 | 1 | 15 | 0 | 1 | 2 | 30 | 0 | 53 | 34 | 17 |
| 6 | 16 | 3 | 8 | 0 | 2 | 5 | 20 | 1 | 34 | 0 | 1 | 15 | 12 | 1 | 2 | 40 | 0 | 53 | 42 | 51 |
| 6 | 17 | 3 | 8 | 30 | 2 | 5 | 40 | 1 | 34 | 15 | 1 | 15 | 24 | 1 | 2 | 50 | 0 | 53 | 51 | 26 |
| 6 | 18 | 3 | 9 | 0 | 2 | 6 | 0 | 1 | 34 | 30 | 1 | 15 | 36 | 1 | 3 | 0 | 0 | 54 | 0 | 0 |
| 6 | 19 | 3 | 9 | 30 | 2 | 6 | 20 | 1 | 34 | 45 | 1 | 15 | 48 | 1 | 3 | 10 | 0 | 54 | 8 | 34 |
| 6 | 20 | 3 | 10 | 0 | 2 | 6 | 40 | 1 | 35 | 0 | 1 | 16 | 0 | 1 | 3 | 20 | 0 | 54 | 17 | 9 |
| 6 | 21 | 3 | 10 | 30 | 2 | 7 | 0 | 1 | 35 | 15 | 1 | 16 | 12 | 1 | 3 | 30 | 0 | 54 | 25 | 43 |
| 6 | 22 | 3 | 11 | 0 | 2 | 7 | 20 | 1 | 35 | 30 | 1 | 16 | 24 | 1 | 3 | 40 | 0 | 54 | 34 | 17 |
| 6 | 23 | 3 | 11 | 30 | 2 | 7 | 40 | 1 | 35 | 45 | 1 | 16 | 36 | 1 | 3 | 50 | 0 | 54 | 42 | 51 |
| 6 | 24 | 3 | 12 | 0 | 2 | 8 | 0 | 1 | 36 | 0 | 1 | 16 | 48 | 1 | 4 | 0 | 0 | 54 | 51 | 26 |
| 6 | 25 | 3 | 12 | 30 | 2 | 8 | 20 | 1 | 36 | 15 | 1 | 17 | 0 | 1 | 4 | 10 | 0 | 55 | 0 | 0 |
| 6 | 26 | 3 | 13 | 0 | 2 | 8 | 40 | 1 | 36 | 30 | 1 | 17 | 12 | 1 | 4 | 20 | 0 | 55 | 8 | 34 |
| 6 | 27 | 3 | 13 | 30 | 2 | 9 | 0 | 1 | 36 | 45 | 1 | 17 | 24 | 1 | 4 | 30 | 0 | 55 | 17 | 9 |
| 6 | 28 | 3 | 14 | 0 | 2 | 9 | 20 | 1 | 37 | 0 | 1 | 17 | 36 | 1 | 4 | 40 | 0 | 55 | 25 | 43 |
| 6 | 29 | 3 | 14 | 30 | 2 | 9 | 40 | 1 | 37 | 15 | 1 | 17 | 48 | 1 | 4 | 50 | 0 | 55 | 34 | 17 |
| 6 | 30 | 3 | 15 | 0 | 2 | 10 | 0 | 1 | 37 | 30 | 1 | 18 | 0 | 1 | 5 | 0 | 0 | 55 | 42 | 51 |
| 6 | 31 | 3 | 15 | 30 | 2 | 10 | 20 | 1 | 37 | 45 | 1 | 18 | 12 | 1 | 5 | 10 | 0 | 55 | 51 | 26 |
| 6 | 32 | 3 | 16 | 0 | 2 | 10 | 40 | 1 | 38 | 0 | 1 | 18 | 24 | 1 | 5 | 20 | 0 | 56 | 0 | 0 |
| 6 | 33 | 3 | 16 | 30 | 2 | 11 | 0 | 1 | 38 | 15 | 1 | 18 | 36 | 1 | 5 | 30 | 0 | 56 | 8 | 34 |
| 6 | 34 | 3 | 17 | 0 | 2 | 11 | 20 | 1 | 38 | 30 | 1 | 18 | 48 | 1 | 5 | 40 | 0 | 56 | 17 | 9 |
| 6 | 35 | 3 | 17 | 30 | 2 | 11 | 40 | 1 | 38 | 45 | 1 | 19 | 0 | 1 | 5 | 50 | 0 | 56 | 25 | 43 |
| 6 | 36 | 3 | 18 | 0 | 2 | 12 | 0 | 1 | 39 | 0 | 1 | 19 | 12 | 1 | 6 | 0 | 0 | 56 | 34 | 17 |
| 6 | 37 | 3 | 18 | 30 | 2 | 12 | 20 | 1 | 39 | 15 | 1 | 19 | 24 | 1 | 6 | 10 | 0 | 56 | 42 | 51 |
| 6 | 38 | 3 | 19 | 0 | 2 | 12 | 40 | 1 | 39 | 30 | 1 | 19 | 36 | 1 | 6 | 20 | 0 | 56 | 51 | 26 |
| 6 | 39 | 3 | 19 | 30 | 2 | 13 | 0 | 1 | 39 | 45 | 1 | 19 | 48 | 1 | 6 | 30 | 0 | 57 | 0 | 0 |
| 6 | 40 | 3 | 20 | 0 | 2 | 13 | 20 | 1 | 40 | 0 | 1 | 20 | 0 | 1 | 6 | 40 | 0 | 57 | 8 | 34 |
| 6 | 41 | 3 | 20 | 30 | 2 | 13 | 40 | 1 | 40 | 15 | 1 | 20 | 12 | 1 | 6 | 50 | 0 | 57 | 17 | 9 |
| 6 | 42 | 3 | 21 | 0 | 2 | 14 | 0 | 1 | 40 | 30 | 1 | 20 | 24 | 1 | 7 | 0 | 0 | 57 | 25 | 43 |
| 6 | 43 | 3 | 21 | 30 | 2 | 14 | 20 | 1 | 40 | 45 | 1 | 20 | 36 | 1 | 7 | 10 | 0 | 57 | 34 | 17 |
| 6 | 44 | 3 | 22 | 0 | 2 | 14 | 40 | 1 | 41 | 0 | 1 | 20 | 48 | 1 | 7 | 20 | 0 | 57 | 42 | 51 |
| 6 | 45 | 3 | 22 | 30 | 2 | 15 | 0 | 1 | 41 | 15 | 1 | 21 | 0 | 1 | 7 | 30 | 0 | 57 | 51 | 26 |
| 6 | 46 | 3 | 23 | 0 | 2 | 15 | 20 | 1 | 41 | 30 | 1 | 21 | 12 | 1 | 7 | 40 | 0 | 58 | 0 | 0 |
| 6 | 47 | 3 | 23 | 30 | 2 | 15 | 40 | 1 | 41 | 45 | 1 | 21 | 24 | 1 | 7 | 50 | 0 | 58 | 8 | 34 |
| 6 | 48 | 3 | 24 | 0 | 2 | 16 | 0 | 1 | 42 | 0 | 1 | 21 | 36 | 1 | 8 | 0 | 0 | 58 | 17 | 9 |
| 6 | 49 | 3 | 24 | 30 | 2 | 16 | 20 | 1 | 42 | 15 | 1 | 21 | 48 | 1 | 8 | 10 | 0 | 58 | 25 | 43 |
| 6 | 50 | 3 | 25 | 0 | 2 | 16 | 40 | 1 | 42 | 30 | 1 | 22 | 0 | 1 | 8 | 20 | 0 | 58 | 34 | 17 |
| 6 | 51 | 3 | 25 | 30 | 2 | 17 | 0 | 1 | 42 | 45 | 1 | 22 | 12 | 1 | 8 | 30 | 0 | 58 | 42 | 51 |
| 6 | 52 | 3 | 26 | 0 | 2 | 17 | 20 | 1 | 43 | 0 | 1 | 22 | 24 | 1 | 8 | 40 | 0 | 58 | 51 | 26 |
| 6 | 53 | 3 | 26 | 30 | 2 | 17 | 40 | 1 | 43 | 15 | 1 | 22 | 36 | 1 | 8 | 50 | 0 | 59 | 0 | 0 |
| 6 | 54 | 3 | 27 | 0 | 2 | 18 | 0 | 1 | 43 | 30 | 1 | 22 | 48 | 1 | 9 | 0 | 0 | 59 | 8 | 34 |
| 6 | 55 | 3 | 27 | 30 | 2 | 18 | 20 | 1 | 43 | 45 | 1 | 23 | 0 | 1 | 9 | 10 | 0 | 59 | 17 | 9 |
| 6 | 56 | 3 | 28 | 0 | 2 | 18 | 40 | 1 | 44 | 0 | 1 | 23 | 12 | 1 | 9 | 20 | 0 | 59 | 25 | 43 |
| 6 | 57 | 3 | 28 | 30 | 2 | 19 | 0 | 1 | 44 | 15 | 1 | 23 | 24 | 1 | 9 | 30 | 0 | 59 | 34 | 17 |
| 6 | 58 | 3 | 29 | 0 | 2 | 19 | 20 | 1 | 44 | 30 | 1 | 23 | 36 | 1 | 9 | 40 | 0 | 59 | 42 | 51 |
| 6 | 59 | 3 | 29 | 30 | 2 | 19 | 40 | 1 | 44 | 45 | 1 | 23 | 48 | 1 | 9 | 50 | 0 | 59 | 51 | 26 |
| 7 | 0 | 3 | 30 | 0 | 2 | 20 | 0 | 1 | 45 | 0 | 1 | 24 | 0 | 1 | 10 | 0 | 1 | 0 | 0 | 0 |

| S | m | Secunda dies S | m | 2 | Tertia dies S | m | 2 | Quarta dies S | m | 2 | Quinta dies S | m | 2 | Sexta dies S | m | 2 | Septima dies S | m | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 1 | 3 | 30 | 30 | 2 | 20 | 20 | 1 | 45 | 15 | 1 | 24 | 12 | 1 | 10 | 10 | 1 | 0 | 8 | 34 |
| 7 | 2 | 3 | 31 | 0 | 2 | 20 | 40 | 1 | 45 | 30 | 1 | 24 | 24 | 1 | 10 | 20 | 1 | 0 | 17 | 9 |
| 7 | 3 | 3 | 31 | 30 | 2 | 21 | 0 | 1 | 45 | 45 | 1 | 24 | 36 | 1 | 10 | 30 | 1 | 0 | 25 | 43 |
| 7 | 4 | 3 | 32 | 0 | 2 | 21 | 20 | 1 | 46 | 0 | 1 | 24 | 48 | 1 | 10 | 40 | 1 | 0 | 34 | 17 |
| 7 | 5 | 3 | 32 | 30 | 2 | 21 | 40 | 1 | 46 | 15 | 1 | 25 | 0 | 1 | 10 | 50 | 1 | 0 | 42 | 51 |
| 7 | 6 | 3 | 33 | 0 | 2 | 22 | 0 | 1 | 46 | 30 | 1 | 25 | 12 | 1 | 11 | 0 | 1 | 0 | 51 | 26 |
| 7 | 7 | 3 | 33 | 30 | 2 | 22 | 20 | 1 | 46 | 45 | 1 | 25 | 24 | 1 | 11 | 10 | 1 | 1 | 0 | 0 |
| 7 | 8 | 3 | 34 | 0 | 2 | 22 | 40 | 1 | 47 | 0 | 1 | 25 | 36 | 1 | 11 | 20 | 1 | 1 | 8 | 34 |
| 7 | 9 | 3 | 34 | 30 | 2 | 23 | 0 | 1 | 47 | 15 | 1 | 25 | 48 | 1 | 11 | 30 | 1 | 1 | 17 | 9 |
| 7 | 10 | 3 | 35 | 0 | 2 | 23 | 20 | 1 | 47 | 30 | 1 | 26 | 0 | 1 | 11 | 40 | 1 | 1 | 25 | 43 |
| 7 | 11 | 3 | 35 | 30 | 2 | 23 | 40 | 1 | 47 | 45 | 1 | 26 | 12 | 1 | 11 | 50 | 1 | 1 | 34 | 17 |
| 7 | 12 | 3 | 36 | 0 | 2 | 24 | 0 | 1 | 48 | 0 | 1 | 26 | 24 | 1 | 12 | 0 | 1 | 1 | 42 | 51 |
| 7 | 13 | 3 | 36 | 30 | 2 | 24 | 20 | 1 | 48 | 15 | 1 | 26 | 36 | 1 | 12 | 10 | 1 | 1 | 51 | 26 |
| 7 | 14 | 3 | 37 | 0 | 2 | 24 | 40 | 1 | 48 | 30 | 1 | 26 | 48 | 1 | 12 | 20 | 1 | 2 | 0 | 0 |
| 7 | 15 | 3 | 37 | 30 | 2 | 25 | 0 | 1 | 48 | 45 | 1 | 27 | 0 | 1 | 12 | 30 | 1 | 2 | 8 | 34 |
| 7 | 16 | 3 | 38 | 0 | 2 | 25 | 20 | 1 | 49 | 0 | 1 | 27 | 12 | 1 | 12 | 40 | 1 | 2 | 17 | 9 |
| 7 | 17 | 3 | 38 | 30 | 2 | 25 | 40 | 1 | 49 | 15 | 1 | 27 | 24 | 1 | 12 | 50 | 1 | 2 | 25 | 43 |
| 7 | 18 | 3 | 39 | 0 | 2 | 26 | 0 | 1 | 49 | 30 | 1 | 27 | 36 | 1 | 13 | 0 | 1 | 2 | 34 | 17 |
| 7 | 19 | 3 | 39 | 30 | 2 | 26 | 20 | 1 | 49 | 45 | 1 | 27 | 48 | 1 | 13 | 10 | 1 | 2 | 42 | 51 |
| 7 | 20 | 3 | 40 | 0 | 2 | 26 | 40 | 1 | 50 | 0 | 1 | 28 | 0 | 1 | 13 | 20 | 1 | 2 | 51 | 26 |
| 7 | 21 | 3 | 40 | 30 | 2 | 27 | 0 | 1 | 50 | 15 | 1 | 28 | 12 | 1 | 13 | 30 | 1 | 3 | 0 | 0 |
| 7 | 22 | 3 | 41 | 0 | 2 | 27 | 20 | 1 | 50 | 30 | 1 | 28 | 24 | 1 | 13 | 40 | 1 | 3 | 8 | 34 |
| 7 | 23 | 3 | 41 | 30 | 2 | 27 | 40 | 1 | 50 | 45 | 1 | 28 | 36 | 1 | 13 | 50 | 1 | 3 | 17 | 9 |
| 7 | 24 | 3 | 42 | 0 | 2 | 28 | 0 | 1 | 51 | 0 | 1 | 28 | 48 | 1 | 14 | 0 | 1 | 3 | 25 | 43 |
| 7 | 25 | 3 | 42 | 30 | 2 | 28 | 20 | 1 | 51 | 15 | 1 | 29 | 0 | 1 | 14 | 10 | 1 | 3 | 34 | 17 |
| 7 | 26 | 3 | 43 | 0 | 2 | 28 | 40 | 1 | 51 | 30 | 1 | 29 | 12 | 1 | 14 | 20 | 1 | 3 | 42 | 51 |
| 7 | 27 | 3 | 43 | 30 | 2 | 29 | 0 | 1 | 51 | 45 | 1 | 29 | 24 | 1 | 14 | 30 | 1 | 3 | 51 | 26 |
| 7 | 28 | 3 | 44 | 0 | 2 | 29 | 20 | 1 | 52 | 0 | 1 | 29 | 36 | 1 | 14 | 40 | 1 | 4 | 0 | 0 |
| 7 | 29 | 3 | 44 | 30 | 2 | 29 | 40 | 1 | 52 | 15 | 1 | 29 | 48 | 1 | 14 | 50 | 1 | 4 | 8 | 34 |
| 7 | 30 | 3 | 45 | 0 | 2 | 30 | 0 | 1 | 52 | 30 | 1 | 30 | 0 | 1 | 15 | 0 | 1 | 4 | 17 | 9 |
| 7 | 31 | 3 | 45 | 30 | 2 | 30 | 20 | 1 | 52 | 45 | 1 | 30 | 12 | 1 | 15 | 10 | 1 | 4 | 25 | 43 |
| 7 | 32 | 3 | 46 | 0 | 2 | 30 | 40 | 1 | 53 | 0 | 1 | 30 | 24 | 1 | 15 | 20 | 1 | 4 | 34 | 17 |
| 7 | 33 | 3 | 46 | 30 | 2 | 31 | 0 | 1 | 53 | 15 | 1 | 30 | 36 | 1 | 15 | 30 | 1 | 4 | 42 | 51 |
| 7 | 34 | 3 | 47 | 0 | 2 | 31 | 20 | 1 | 53 | 30 | 1 | 30 | 48 | 1 | 15 | 40 | 1 | 4 | 51 | 26 |
| 7 | 35 | 3 | 47 | 30 | 2 | 31 | 40 | 1 | 53 | 45 | 1 | 31 | 0 | 1 | 15 | 50 | 1 | 5 | 0 | 0 |
| 7 | 36 | 3 | 48 | 0 | 2 | 32 | 0 | 1 | 54 | 0 | 1 | 31 | 12 | 1 | 16 | 0 | 1 | 5 | 8 | 34 |
| 7 | 37 | 3 | 48 | 30 | 2 | 32 | 20 | 1 | 54 | 15 | 1 | 31 | 24 | 1 | 16 | 10 | 1 | 5 | 17 | 9 |
| 7 | 38 | 3 | 49 | 0 | 2 | 32 | 40 | 1 | 54 | 30 | 1 | 31 | 36 | 1 | 16 | 20 | 1 | 5 | 25 | 43 |
| 7 | 39 | 3 | 49 | 30 | 2 | 33 | 0 | 1 | 54 | 45 | 1 | 31 | 48 | 1 | 16 | 30 | 1 | 5 | 34 | 17 |
| 7 | 40 | 3 | 50 | 0 | 2 | 33 | 20 | 1 | 55 | 0 | 1 | 32 | 0 | 1 | 16 | 40 | 1 | 5 | 42 | 51 |
| 7 | 41 | 3 | 50 | 30 | 2 | 33 | 40 | 1 | 55 | 15 | 1 | 32 | 12 | 1 | 16 | 50 | 1 | 5 | 51 | 26 |
| 7 | 42 | 3 | 51 | 0 | 2 | 34 | 0 | 1 | 55 | 30 | 1 | 32 | 24 | 1 | 17 | 0 | 1 | 6 | 0 | 0 |
| 7 | 43 | 3 | 51 | 30 | 2 | 34 | 20 | 1 | 55 | 45 | 1 | 32 | 36 | 1 | 17 | 10 | 1 | 6 | 8 | 34 |
| 7 | 44 | 3 | 52 | 0 | 2 | 34 | 40 | 1 | 56 | 0 | 1 | 32 | 48 | 1 | 17 | 20 | 1 | 6 | 17 | 9 |
| 7 | 45 | 3 | 52 | 30 | 2 | 35 | 0 | 1 | 56 | 15 | 1 | 33 | 0 | 1 | 17 | 30 | 1 | 6 | 25 | 43 |
| 7 | 46 | 3 | 53 | 0 | 2 | 35 | 20 | 1 | 56 | 30 | 1 | 33 | 12 | 1 | 17 | 40 | 1 | 6 | 34 | 17 |
| 7 | 47 | 3 | 53 | 30 | 2 | 35 | 40 | 1 | 56 | 45 | 1 | 33 | 24 | 1 | 17 | 50 | 1 | 6 | 42 | 51 |
| 7 | 48 | 3 | 54 | 0 | 2 | 36 | 0 | 1 | 57 | 0 | 1 | 33 | 36 | 1 | 18 | 0 | 1 | 6 | 51 | 26 |
| 7 | 49 | 3 | 54 | 30 | 2 | 36 | 20 | 1 | 57 | 15 | 1 | 33 | 48 | 1 | 18 | 10 | 1 | 7 | 0 | 0 |
| 7 | 50 | 3 | 55 | 0 | 2 | 36 | 40 | 1 | 57 | 30 | 1 | 34 | 0 | 1 | 18 | 20 | 1 | 7 | 8 | 34 |
| 7 | 51 | 3 | 55 | 30 | 2 | 37 | 0 | 1 | 57 | 45 | 1 | 34 | 12 | 1 | 18 | 30 | 1 | 7 | 17 | 9 |
| 7 | 52 | 3 | 56 | 0 | 2 | 37 | 20 | 1 | 58 | 0 | 1 | 34 | 24 | 1 | 18 | 40 | 1 | 7 | 25 | 43 |
| 7 | 53 | 3 | 56 | 30 | 2 | 37 | 40 | 1 | 58 | 15 | 1 | 34 | 36 | 1 | 18 | 50 | 1 | 7 | 34 | 17 |
| 7 | 54 | 3 | 57 | 0 | 2 | 38 | 0 | 1 | 58 | 30 | 1 | 34 | 48 | 1 | 19 | 0 | 1 | 7 | 42 | 51 |
| 7 | 55 | 3 | 57 | 30 | 2 | 38 | 20 | 1 | 58 | 45 | 1 | 35 | 0 | 1 | 19 | 10 | 1 | 7 | 51 | 26 |
| 7 | 56 | 3 | 58 | 0 | 2 | 38 | 40 | 1 | 59 | 0 | 1 | 35 | 12 | 1 | 19 | 20 | 1 | 8 | 0 | 0 |
| 7 | 57 | 3 | 58 | 30 | 2 | 39 | 0 | 1 | 59 | 15 | 1 | 35 | 24 | 1 | 19 | 30 | 1 | 8 | 8 | 34 |
| 7 | 58 | 3 | 59 | 0 | 2 | 39 | 20 | 1 | 59 | 30 | 1 | 35 | 36 | 1 | 19 | 40 | 1 | 8 | 17 | 9 |
| 7 | 59 | 3 | 59 | 30 | 2 | 39 | 40 | 1 | 59 | 45 | 1 | 35 | 48 | 1 | 19 | 50 | 1 | 8 | 25 | 43 |
| 8 | 0 | 4 | 0 | 0 | 2 | 40 | 0 | 2 | 0 | 0 | 1 | 36 | 0 | 1 | 20 | 0 | 1 | 8 | 34 | 17 |

# Ultime partes precedencium tabularum pro diebus

| Ora | | Secunda dies | | | Tercia dies | | | Quarta dies | | | Quinta dies | | | Sexta dies | | | Septima dies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| g | m | g | m | 2 | g | m | 2 | g | m | 2 | g | m | 2 | g | m | 2 | g | m | 2 | 3 |
| 8 | 1 | 4 | 0 | 30 | 2 | 40 | 20 | 2 | 0 | 15 | 1 | 36 | 12 | 1 | 20 | 10 | 1 | 8 | 42 | 51 |
| 8 | 2 | 4 | 1 | 0 | 2 | 40 | 40 | 2 | 0 | 30 | 1 | 36 | 24 | 1 | 20 | 20 | 1 | 8 | 51 | 26 |
| 8 | 3 | 4 | 1 | 30 | 2 | 41 | 0 | 2 | 0 | 45 | 1 | 36 | 36 | 1 | 20 | 30 | 1 | 9 | 0 | 0 |
| 8 | 4 | 4 | 2 | 0 | 2 | 41 | 20 | 2 | 1 | 0 | 1 | 36 | 48 | 1 | 20 | 40 | 1 | 9 | 8 | 34 |
| 8 | 5 | 4 | 2 | 30 | 2 | 41 | 40 | 2 | 1 | 15 | 1 | 37 | 0 | 1 | 20 | 50 | 1 | 9 | 17 | 9 |
| 8 | 6 | 4 | 3 | 0 | 2 | 42 | 0 | 2 | 1 | 30 | 1 | 37 | 12 | 1 | 21 | 0 | 1 | 9 | 25 | 43 |
| 8 | 7 | 4 | 3 | 30 | 2 | 42 | 20 | 2 | 1 | 45 | 1 | 37 | 24 | 1 | 21 | 10 | 1 | 9 | 34 | 17 |
| 8 | 8 | 4 | 4 | 0 | 2 | 42 | 40 | 2 | 2 | 0 | 1 | 37 | 36 | 1 | 21 | 20 | 1 | 9 | 42 | 51 |
| 8 | 9 | 4 | 4 | 30 | 2 | 43 | 0 | 2 | 2 | 15 | 1 | 37 | 48 | 1 | 21 | 30 | 1 | 9 | 51 | 26 |
| 8 | 10 | 4 | 5 | 0 | 2 | 43 | 20 | 2 | 2 | 30 | 1 | 38 | 0 | 1 | 21 | 40 | 1 | 10 | 0 | 0 |
| 8 | 11 | 4 | 5 | 30 | 2 | 43 | 40 | 2 | 2 | 45 | 1 | 38 | 12 | 1 | 21 | 50 | 1 | 10 | 8 | 34 |
| 8 | 12 | 4 | 6 | 0 | 2 | 44 | 0 | 2 | 3 | 0 | 1 | 38 | 24 | 1 | 22 | 0 | 1 | 10 | 17 | 9 |
| 8 | 13 | 4 | 6 | 30 | 2 | 44 | 20 | 2 | 3 | 15 | 1 | 38 | 36 | 1 | 22 | 10 | 1 | 10 | 25 | 43 |
| 8 | 14 | 4 | 7 | 0 | 2 | 44 | 40 | 2 | 3 | 30 | 1 | 38 | 48 | 1 | 22 | 20 | 1 | 10 | 34 | 17 |
| 8 | 15 | 4 | 7 | 30 | 2 | 45 | 0 | 2 | 3 | 45 | 1 | 39 | 0 | 1 | 22 | 30 | 1 | 10 | 42 | 51 |
| 8 | 16 | 4 | 8 | 0 | 2 | 45 | 20 | 2 | 4 | 0 | 1 | 39 | 12 | 1 | 22 | 40 | 1 | 10 | 51 | 26 |
| 8 | 17 | 4 | 8 | 30 | 2 | 45 | 40 | 2 | 4 | 15 | 1 | 39 | 24 | 1 | 22 | 50 | 1 | 11 | 0 | 0 |
| 8 | 18 | 4 | 9 | 0 | 2 | 46 | 0 | 2 | 4 | 30 | 1 | 39 | 36 | 1 | 23 | 0 | 1 | 11 | 8 | 34 |
| 8 | 19 | 4 | 9 | 30 | 2 | 46 | 20 | 2 | 4 | 45 | 1 | 39 | 48 | 1 | 23 | 10 | 1 | 11 | 17 | 9 |
| 8 | 20 | 4 | 10 | 0 | 2 | 46 | 40 | 2 | 5 | 0 | 1 | 40 | 0 | 1 | 23 | 20 | 1 | 11 | 25 | 43 |
| 8 | 21 | 4 | 10 | 30 | 2 | 47 | 0 | 2 | 5 | 15 | 1 | 40 | 12 | 1 | 23 | 30 | 1 | 11 | 34 | 17 |
| 8 | 22 | 4 | 11 | 0 | 2 | 47 | 20 | 2 | 5 | 30 | 1 | 40 | 24 | 1 | 23 | 40 | 1 | 11 | 42 | 51 |
| 8 | 23 | 4 | 11 | 30 | 2 | 47 | 40 | 2 | 5 | 45 | 1 | 40 | 36 | 1 | 23 | 50 | 1 | 11 | 51 | 26 |
| 8 | 24 | 4 | 12 | 0 | 2 | 48 | 0 | 2 | 6 | 0 | 1 | 40 | 48 | 1 | 24 | 0 | 1 | 12 | 0 | 0 |
| 8 | 25 | 4 | 12 | 30 | 2 | 48 | 20 | 2 | 6 | 15 | 1 | 41 | 0 | 1 | 24 | 10 | 1 | 12 | 8 | 34 |
| 8 | 26 | 4 | 13 | 0 | 2 | 48 | 40 | 2 | 6 | 30 | 1 | 41 | 12 | 1 | 24 | 20 | 1 | 12 | 17 | 9 |
| 8 | 27 | 4 | 13 | 30 | 2 | 49 | 0 | 2 | 6 | 45 | 1 | 41 | 24 | 1 | 24 | 30 | 1 | 12 | 25 | 43 |
| 8 | 28 | 4 | 14 | 0 | 2 | 49 | 20 | 2 | 7 | 0 | 1 | 41 | 36 | 1 | 24 | 40 | 1 | 12 | 34 | 17 |
| 8 | 29 | 4 | 14 | 30 | 2 | 49 | 40 | 2 | 7 | 15 | 1 | 41 | 48 | 1 | 24 | 50 | 1 | 12 | 42 | 51 |
| 8 | 30 | 4 | 15 | 0 | 2 | 50 | 0 | 2 | 7 | 30 | 1 | 42 | 0 | 1 | 25 | 0 | 1 | 12 | 51 | 26 |
| 8 | 31 | 4 | 15 | 30 | 2 | 50 | 20 | 2 | 7 | 45 | 1 | 42 | 12 | 1 | 25 | 10 | 1 | 13 | 0 | 0 |
| 8 | 32 | 4 | 16 | 0 | 2 | 50 | 40 | 2 | 8 | 0 | 1 | 42 | 24 | 1 | 25 | 20 | 1 | 13 | 8 | 34 |
| 8 | 33 | 4 | 16 | 30 | 2 | 51 | 0 | 2 | 8 | 15 | 1 | 42 | 36 | 1 | 25 | 30 | 1 | 13 | 17 | 9 |
| 8 | 34 | 4 | 17 | 0 | 2 | 51 | 20 | 2 | 8 | 30 | 1 | 42 | 48 | 1 | 25 | 40 | 1 | 13 | 25 | 43 |
| 8 | 35 | 4 | 17 | 30 | 2 | 51 | 40 | 2 | 8 | 45 | 1 | 43 | 0 | 1 | 25 | 50 | 1 | 13 | 34 | 17 |
| 8 | 36 | 4 | 18 | 0 | 2 | 52 | 0 | 2 | 9 | 0 | 1 | 43 | 12 | 1 | 26 | 0 | 1 | 13 | 42 | 51 |
| 8 | 37 | 4 | 18 | 30 | 2 | 52 | 20 | 2 | 9 | 15 | 1 | 43 | 24 | 1 | 26 | 10 | 1 | 13 | 51 | 26 |
| 8 | 38 | 4 | 19 | 0 | 2 | 52 | 40 | 2 | 9 | 30 | 1 | 43 | 36 | 1 | 26 | 20 | 1 | 14 | 0 | 0 |
| 8 | 39 | 4 | 19 | 30 | 2 | 53 | 0 | 2 | 9 | 45 | 1 | 43 | 48 | 1 | 26 | 30 | 1 | 14 | 8 | 34 |
| 8 | 40 | 4 | 20 | 0 | 2 | 53 | 20 | 2 | 10 | 0 | 1 | 44 | 0 | 1 | 26 | 40 | 1 | 14 | 17 | 9 |
| 8 | 41 | 4 | 20 | 30 | 2 | 53 | 40 | 2 | 10 | 15 | 1 | 44 | 12 | 1 | 26 | 50 | 1 | 14 | 25 | 43 |
| 8 | 42 | 4 | 21 | 0 | 2 | 54 | 0 | 2 | 10 | 30 | 1 | 44 | 24 | 1 | 27 | 0 | 1 | 14 | 34 | 17 |
| 8 | 43 | 4 | 21 | 30 | 2 | 54 | 20 | 2 | 10 | 45 | 1 | 44 | 36 | 1 | 27 | 10 | 1 | 14 | 42 | 51 |
| 8 | 44 | 4 | 22 | 0 | 2 | 54 | 40 | 2 | 11 | 0 | 1 | 44 | 48 | 1 | 27 | 20 | 1 | 14 | 51 | 26 |
| 8 | 45 | 4 | 22 | 30 | 2 | 55 | 0 | 2 | 11 | 15 | 1 | 45 | 0 | 1 | 27 | 30 | 1 | 15 | 0 | 0 |
| 8 | 46 | 4 | 23 | 0 | 2 | 55 | 20 | 2 | 11 | 30 | 1 | 45 | 12 | 1 | 27 | 40 | 1 | 15 | 8 | 34 |
| 8 | 47 | 4 | 23 | 30 | 2 | 55 | 40 | 2 | 11 | 45 | 1 | 45 | 24 | 1 | 27 | 50 | 1 | 15 | 17 | 9 |
| 8 | 48 | 4 | 24 | 0 | 2 | 56 | 0 | 2 | 12 | 0 | 1 | 45 | 36 | 1 | 28 | 0 | 1 | 15 | 25 | 43 |
| 8 | 49 | 4 | 24 | 30 | 2 | 56 | 20 | 2 | 12 | 15 | 1 | 45 | 48 | 1 | 28 | 10 | 1 | 15 | 34 | 17 |
| 8 | 50 | 4 | 25 | 0 | 2 | 56 | 40 | 2 | 12 | 30 | 1 | 46 | 0 | 1 | 28 | 20 | 1 | 15 | 42 | 51 |
| 8 | 51 | 4 | 25 | 30 | 2 | 57 | 0 | 2 | 12 | 45 | 1 | 46 | 12 | 1 | 28 | 30 | 1 | 15 | 51 | 26 |
| 8 | 52 | 4 | 26 | 0 | 2 | 57 | 20 | 2 | 13 | 0 | 1 | 46 | 24 | 1 | 28 | 40 | 1 | 16 | 0 | 0 |
| 8 | 53 | 4 | 26 | 30 | 2 | 57 | 40 | 2 | 13 | 15 | 1 | 46 | 36 | 1 | 28 | 50 | 1 | 16 | 8 | 34 |
| 8 | 54 | 4 | 27 | 0 | 2 | 58 | 0 | 2 | 13 | 30 | 1 | 46 | 48 | 1 | 29 | 0 | 1 | 16 | 17 | 9 |
| 8 | 55 | 4 | 27 | 30 | 2 | 58 | 20 | 2 | 13 | 45 | 1 | 47 | 0 | 1 | 29 | 10 | 1 | 16 | 25 | 43 |
| 8 | 56 | 4 | 28 | 0 | 2 | 58 | 40 | 2 | 14 | 0 | 1 | 47 | 12 | 1 | 29 | 20 | 1 | 16 | 34 | 17 |
| 8 | 57 | 4 | 28 | 30 | 2 | 59 | 0 | 2 | 14 | 15 | 1 | 47 | 24 | 1 | 29 | 30 | 1 | 16 | 42 | 51 |
| 8 | 58 | 4 | 29 | 0 | 2 | 59 | 20 | 2 | 14 | 30 | 1 | 47 | 36 | 1 | 29 | 40 | 1 | 16 | 51 | 26 |
| 8 | 59 | 4 | 29 | 30 | 2 | 59 | 40 | 2 | 14 | 45 | 1 | 47 | 48 | 1 | 29 | 50 | 1 | 17 | 0 | 0 |
| 9 | 0 | 4 | 30 | 0 | 3 | 0 | 0 | 2 | 15 | 0 | 1 | 48 | 0 | 1 | 30 | 0 | 1 | 17 | 8 | 34 |

| Ora | | Octava dies | | | | Nona dies | | | | Decima dies | | | | Undecima dies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| g | m | g | m | 2 | 3 | g | m | 2 | 3 | g | m | 2 | 3 | g | m | 2 | 3 |
| 0 | 1 | 0 | 0 | 7 | 30 | 0 | 0 | 6 | 40 | 0 | 0 | 6 | 0 | 0 | 0 | 5 | 27 |
| 0 | 2 | 0 | 0 | 15 | 0 | 0 | 0 | 13 | 20 | 0 | 0 | 12 | 0 | 0 | 0 | 10 | 54 |
| 0 | 3 | 0 | 0 | 22 | 30 | 0 | 0 | 20 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 16 | 22 |
| 0 | 4 | 0 | 0 | 30 | 0 | 0 | 0 | 26 | 40 | 0 | 0 | 24 | 0 | 0 | 0 | 21 | 49 |
| 0 | 5 | 0 | 0 | 37 | 30 | 0 | 0 | 33 | 20 | 0 | 0 | 30 | 0 | 0 | 0 | 27 | 16 |
| 0 | 6 | 0 | 0 | 45 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 32 | 44 |
| 0 | 7 | 0 | 0 | 52 | 30 | 0 | 0 | 46 | 40 | 0 | 0 | 42 | 0 | 0 | 0 | 38 | 11 |
| 0 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 53 | 20 | 0 | 0 | 48 | 0 | 0 | 0 | 43 | 38 |
| 0 | 9 | 0 | 1 | 7 | 30 | 0 | 1 | 0 | 0 | 0 | 0 | 54 | 0 | 0 | 0 | 49 | 5 |
| 0 | 10 | 0 | 1 | 15 | 0 | 0 | 1 | 6 | 40 | 0 | 1 | 0 | 0 | 0 | 0 | 54 | 33 |
| 0 | 11 | 0 | 1 | 22 | 30 | 0 | 1 | 13 | 20 | 0 | 1 | 6 | 0 | 0 | 1 | 0 | 0 |
| 0 | 12 | 0 | 1 | 30 | 0 | 0 | 1 | 20 | 0 | 0 | 1 | 12 | 0 | 0 | 1 | 5 | 27 |
| 0 | 13 | 0 | 1 | 37 | 30 | 0 | 1 | 26 | 40 | 0 | 1 | 18 | 0 | 0 | 1 | 10 | 54 |
| 0 | 14 | 0 | 1 | 45 | 0 | 0 | 1 | 33 | 20 | 0 | 1 | 24 | 0 | 0 | 1 | 16 | 22 |
| 0 | 15 | 0 | 1 | 52 | 30 | 0 | 1 | 40 | 0 | 0 | 1 | 30 | 0 | 0 | 1 | 21 | 49 |
| 0 | 16 | 0 | 2 | 0 | 0 | 0 | 1 | 46 | 40 | 0 | 1 | 36 | 0 | 0 | 1 | 27 | 16 |
| 0 | 17 | 0 | 2 | 7 | 30 | 0 | 1 | 53 | 20 | 0 | 1 | 42 | 0 | 0 | 1 | 32 | 44 |
| 0 | 18 | 0 | 2 | 15 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 48 | 0 | 0 | 1 | 38 | 11 |
| 0 | 19 | 0 | 2 | 22 | 30 | 0 | 2 | 6 | 40 | 0 | 1 | 54 | 0 | 0 | 1 | 43 | 38 |
| 0 | 20 | 0 | 2 | 30 | 0 | 0 | 2 | 13 | 20 | 0 | 2 | 0 | 0 | 0 | 1 | 49 | 5 |
| 0 | 21 | 0 | 2 | 37 | 30 | 0 | 2 | 20 | 0 | 0 | 2 | 6 | 0 | 0 | 1 | 54 | 33 |
| 0 | 22 | 0 | 2 | 45 | 0 | 0 | 2 | 26 | 40 | 0 | 2 | 12 | 0 | 0 | 2 | 0 | 0 |
| 0 | 23 | 0 | 2 | 52 | 30 | 0 | 2 | 33 | 20 | 0 | 2 | 18 | 0 | 0 | 2 | 5 | 27 |
| 0 | 24 | 0 | 3 | 0 | 0 | 0 | 2 | 40 | 0 | 0 | 2 | 24 | 0 | 0 | 2 | 10 | 54 |
| 0 | 25 | 0 | 3 | 7 | 30 | 0 | 2 | 46 | 40 | 0 | 2 | 30 | 0 | 0 | 2 | 16 | 22 |
| 0 | 26 | 0 | 3 | 15 | 0 | 0 | 2 | 53 | 20 | 0 | 2 | 36 | 0 | 0 | 2 | 21 | 49 |
| 0 | 27 | 0 | 3 | 22 | 30 | 0 | 3 | 0 | 0 | 0 | 2 | 42 | 0 | 0 | 2 | 27 | 16 |
| 0 | 28 | 0 | 3 | 30 | 0 | 0 | 3 | 6 | 40 | 0 | 2 | 48 | 0 | 0 | 2 | 32 | 44 |
| 0 | 29 | 0 | 3 | 37 | 30 | 0 | 3 | 13 | 20 | 0 | 2 | 54 | 0 | 0 | 2 | 38 | 11 |
| 0 | 30 | 0 | 3 | 45 | 0 | 0 | 3 | 20 | 0 | 0 | 3 | 0 | 0 | 0 | 2 | 43 | 38 |
| 0 | 31 | 0 | 3 | 52 | 30 | 0 | 3 | 26 | 40 | 0 | 3 | 6 | 0 | 0 | 2 | 49 | 5 |
| 0 | 32 | 0 | 4 | 0 | 0 | 0 | 3 | 33 | 20 | 0 | 3 | 12 | 0 | 0 | 2 | 54 | 33 |
| 0 | 33 | 0 | 4 | 7 | 30 | 0 | 3 | 40 | 0 | 0 | 3 | 18 | 0 | 0 | 3 | 0 | 0 |
| 0 | 34 | 0 | 4 | 15 | 0 | 0 | 3 | 46 | 40 | 0 | 3 | 24 | 0 | 0 | 3 | 5 | 27 |
| 0 | 35 | 0 | 4 | 22 | 30 | 0 | 3 | 53 | 20 | 0 | 3 | 30 | 0 | 0 | 3 | 10 | 54 |
| 0 | 36 | 0 | 4 | 30 | 0 | 0 | 4 | 0 | 0 | 0 | 3 | 36 | 0 | 0 | 3 | 16 | 22 |
| 0 | 37 | 0 | 4 | 37 | 30 | 0 | 4 | 6 | 40 | 0 | 3 | 42 | 0 | 0 | 3 | 21 | 49 |
| 0 | 38 | 0 | 4 | 45 | 0 | 0 | 4 | 13 | 20 | 0 | 3 | 48 | 0 | 0 | 3 | 27 | 16 |
| 0 | 39 | 0 | 4 | 52 | 30 | 0 | 4 | 20 | 0 | 0 | 3 | 54 | 0 | 0 | 3 | 32 | 44 |
| 0 | 40 | 0 | 5 | 0 | 0 | 0 | 4 | 26 | 40 | 0 | 4 | 0 | 0 | 0 | 3 | 38 | 11 |
| 0 | 41 | 0 | 5 | 7 | 30 | 0 | 4 | 33 | 20 | 0 | 4 | 6 | 0 | 0 | 3 | 43 | 38 |
| 0 | 42 | 0 | 5 | 15 | 0 | 0 | 4 | 40 | 0 | 0 | 4 | 12 | 0 | 0 | 3 | 49 | 5 |
| 0 | 43 | 0 | 5 | 22 | 30 | 0 | 4 | 46 | 40 | 0 | 4 | 18 | 0 | 0 | 3 | 54 | 33 |
| 0 | 44 | 0 | 5 | 30 | 0 | 0 | 4 | 53 | 20 | 0 | 4 | 24 | 0 | 0 | 4 | 0 | 0 |
| 0 | 45 | 0 | 5 | 37 | 30 | 0 | 5 | 0 | 0 | 0 | 4 | 30 | 0 | 0 | 4 | 5 | 27 |
| 0 | 46 | 0 | 5 | 45 | 0 | 0 | 5 | 6 | 40 | 0 | 4 | 36 | 0 | 0 | 4 | 10 | 54 |
| 0 | 47 | 0 | 5 | 52 | 30 | 0 | 5 | 13 | 20 | 0 | 4 | 42 | 0 | 0 | 4 | 16 | 22 |
| 0 | 48 | 0 | 6 | 0 | 0 | 0 | 5 | 20 | 0 | 0 | 4 | 48 | 0 | 0 | 4 | 21 | 49 |
| 0 | 49 | 0 | 6 | 7 | 30 | 0 | 5 | 26 | 40 | 0 | 4 | 54 | 0 | 0 | 4 | 27 | 16 |
| 0 | 50 | 0 | 6 | 15 | 0 | 0 | 5 | 33 | 20 | 0 | 5 | 0 | 0 | 0 | 4 | 32 | 44 |
| 0 | 51 | 0 | 6 | 22 | 30 | 0 | 5 | 40 | 0 | 0 | 5 | 6 | 0 | 0 | 4 | 38 | 11 |
| 0 | 52 | 0 | 6 | 30 | 0 | 0 | 5 | 46 | 40 | 0 | 5 | 12 | 0 | 0 | 4 | 43 | 38 |
| 0 | 53 | 0 | 6 | 37 | 30 | 0 | 5 | 53 | 20 | 0 | 5 | 18 | 0 | 0 | 4 | 49 | 5 |
| 0 | 54 | 0 | 6 | 45 | 0 | 0 | 6 | 0 | 0 | 0 | 5 | 24 | 0 | 0 | 4 | 54 | 33 |
| 0 | 55 | 0 | 6 | 52 | 30 | 0 | 6 | 6 | 40 | 0 | 5 | 30 | 0 | 0 | 5 | 0 | 0 |
| 0 | 56 | 0 | 7 | 0 | 0 | 0 | 6 | 13 | 20 | 0 | 5 | 36 | 0 | 0 | 5 | 5 | 27 |
| 0 | 57 | 0 | 7 | 7 | 30 | 0 | 6 | 20 | 0 | 0 | 5 | 42 | 0 | 0 | 5 | 10 | 54 |
| 0 | 58 | 0 | 7 | 15 | 0 | 0 | 6 | 26 | 40 | 0 | 5 | 48 | 0 | 0 | 5 | 16 | 22 |
| 0 | 59 | 0 | 7 | 22 | 30 | 0 | 6 | 33 | 20 | 0 | 5 | 54 | 0 | 0 | 5 | 21 | 49 |
| 1 | 0 | 0 | 7 | 30 | 0 | 0 | 6 | 40 | 0 | 0 | 6 | 0 | 0 | 0 | 5 | 27 | 16 |

# Intermedys in Almanach faciendis:

| | | Octava dies | | | | Nona dies | | | | Decima dies | | | | Undecima dies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | m | S | m | 2 | 3 | S | m | 2 | 3 | S | m | 2 | 3 | S | m | 2 | 3 |
| 1 | 1 | 0 | 7 | 37 | 30 | 0 | 6 | 46 | 40 | 0 | 6 | 6 | 0 | 0 | 5 | 32 | 44 |
| 1 | 2 | 0 | 7 | 45 | 0 | 0 | 6 | 53 | 20 | 0 | 6 | 12 | 0 | 0 | 5 | 38 | 11 |
| 1 | 3 | 0 | 7 | 52 | 30 | 0 | 7 | 0 | 0 | 0 | 6 | 18 | 0 | 0 | 5 | 43 | 38 |
| 1 | 4 | 0 | 8 | 0 | 0 | 0 | 7 | 6 | 40 | 0 | 6 | 24 | 0 | 0 | 5 | 49 | 5 |
| 1 | 5 | 0 | 8 | 7 | 30 | 0 | 7 | 13 | 20 | 0 | 6 | 30 | 0 | 0 | 5 | 54 | 33 |
| 1 | 6 | 0 | 8 | 15 | 0 | 0 | 7 | 20 | 0 | 0 | 6 | 36 | 0 | 0 | 6 | 0 | 0 |
| 1 | 7 | 0 | 8 | 22 | 30 | 0 | 7 | 26 | 40 | 0 | 6 | 42 | 0 | 0 | 6 | 5 | 27 |
| 1 | 8 | 0 | 8 | 30 | 0 | 0 | 7 | 33 | 20 | 0 | 6 | 48 | 0 | 0 | 6 | 10 | 54 |
| 1 | 9 | 0 | 8 | 37 | 30 | 0 | 7 | 40 | 0 | 0 | 6 | 54 | 0 | 0 | 6 | 16 | 22 |
| 1 | 10 | 0 | 8 | 45 | 0 | 0 | 7 | 46 | 40 | 0 | 7 | 0 | 0 | 0 | 6 | 21 | 49 |
| 1 | 11 | 0 | 8 | 52 | 30 | 0 | 7 | 53 | 20 | 0 | 7 | 6 | 0 | 0 | 6 | 27 | 16 |
| 1 | 12 | 0 | 9 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 7 | 12 | 0 | 0 | 6 | 32 | 44 |
| 1 | 13 | 0 | 9 | 7 | 30 | 0 | 8 | 6 | 40 | 0 | 7 | 18 | 0 | 0 | 6 | 38 | 11 |
| 1 | 14 | 0 | 9 | 15 | 0 | 0 | 8 | 13 | 20 | 0 | 7 | 24 | 0 | 0 | 6 | 43 | 38 |
| 1 | 15 | 0 | 9 | 22 | 30 | 0 | 8 | 20 | 0 | 0 | 7 | 30 | 0 | 0 | 6 | 49 | 5 |
| 1 | 16 | 0 | 9 | 30 | 0 | 0 | 8 | 26 | 40 | 0 | 7 | 36 | 0 | 0 | 6 | 54 | 33 |
| 1 | 17 | 0 | 9 | 37 | 30 | 0 | 8 | 33 | 20 | 0 | 7 | 42 | 0 | 0 | 7 | 0 | 0 |
| 1 | 18 | 0 | 9 | 45 | 0 | 0 | 8 | 40 | 0 | 0 | 7 | 48 | 0 | 0 | 7 | 5 | 27 |
| 1 | 19 | 0 | 9 | 52 | 30 | 0 | 8 | 46 | 40 | 0 | 7 | 54 | 0 | 0 | 7 | 10 | 54 |
| 1 | 20 | 0 | 10 | 0 | 0 | 0 | 8 | 53 | 20 | 0 | 8 | 0 | 0 | 0 | 7 | 16 | 22 |
| 1 | 21 | 0 | 10 | 7 | 30 | 0 | 9 | 0 | 0 | 0 | 8 | 6 | 0 | 0 | 7 | 21 | 49 |
| 1 | 22 | 0 | 10 | 15 | 0 | 0 | 9 | 6 | 40 | 0 | 8 | 12 | 0 | 0 | 7 | 27 | 16 |
| 1 | 23 | 0 | 10 | 22 | 30 | 0 | 9 | 13 | 20 | 0 | 8 | 18 | 0 | 0 | 7 | 32 | 44 |
| 1 | 24 | 0 | 10 | 30 | 0 | 0 | 9 | 20 | 0 | 0 | 8 | 24 | 0 | 0 | 7 | 38 | 11 |
| 1 | 25 | 0 | 10 | 37 | 30 | 0 | 9 | 26 | 40 | 0 | 8 | 30 | 0 | 0 | 7 | 43 | 38 |
| 1 | 26 | 0 | 10 | 45 | 0 | 0 | 9 | 33 | 20 | 0 | 8 | 36 | 0 | 0 | 7 | 49 | 5 |
| 1 | 27 | 0 | 10 | 52 | 30 | 0 | 9 | 40 | 0 | 0 | 8 | 42 | 0 | 0 | 7 | 54 | 33 |
| 1 | 28 | 0 | 11 | 0 | 0 | 0 | 9 | 46 | 40 | 0 | 8 | 48 | 0 | 0 | 8 | 0 | 0 |
| 1 | 29 | 0 | 11 | 7 | 30 | 0 | 9 | 53 | 20 | 0 | 8 | 54 | 0 | 0 | 8 | 5 | 27 |
| 1 | 30 | 0 | 11 | 15 | 0 | 0 | 10 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 8 | 10 | 54 |
| 1 | 31 | 0 | 11 | 22 | 30 | 0 | 10 | 6 | 40 | 0 | 9 | 6 | 0 | 0 | 8 | 16 | 22 |
| 1 | 32 | 0 | 11 | 30 | 0 | 0 | 10 | 13 | 20 | 0 | 9 | 12 | 0 | 0 | 8 | 21 | 49 |
| 1 | 33 | 0 | 11 | 37 | 30 | 0 | 10 | 20 | 0 | 0 | 9 | 18 | 0 | 0 | 8 | 27 | 16 |
| 1 | 34 | 0 | 11 | 45 | 0 | 0 | 10 | 26 | 40 | 0 | 9 | 24 | 0 | 0 | 8 | 32 | 44 |
| 1 | 35 | 0 | 11 | 52 | 30 | 0 | 10 | 33 | 20 | 0 | 9 | 30 | 0 | 0 | 8 | 38 | 11 |
| 1 | 36 | 0 | 12 | 0 | 0 | 0 | 10 | 40 | 0 | 0 | 9 | 36 | 0 | 0 | 8 | 43 | 38 |
| 1 | 37 | 0 | 12 | 7 | 30 | 0 | 10 | 46 | 40 | 0 | 9 | 42 | 0 | 0 | 8 | 49 | 5 |
| 1 | 38 | 0 | 12 | 15 | 0 | 0 | 10 | 53 | 20 | 0 | 9 | 48 | 0 | 0 | 8 | 54 | 33 |
| 1 | 39 | 0 | 12 | 22 | 30 | 0 | 11 | 0 | 0 | 0 | 9 | 54 | 0 | 0 | 9 | 0 | 0 |
| 1 | 40 | 0 | 12 | 30 | 0 | 0 | 11 | 6 | 40 | 0 | 10 | 0 | 0 | 0 | 9 | 5 | 27 |
| 1 | 41 | 0 | 12 | 37 | 30 | 0 | 11 | 13 | 20 | 0 | 10 | 6 | 0 | 0 | 9 | 10 | 54 |
| 1 | 42 | 0 | 12 | 45 | 0 | 0 | 11 | 20 | 0 | 0 | 10 | 12 | 0 | 0 | 9 | 16 | 22 |
| 1 | 43 | 0 | 12 | 52 | 30 | 0 | 11 | 26 | 40 | 0 | 10 | 18 | 0 | 0 | 9 | 21 | 49 |
| 1 | 44 | 0 | 13 | 0 | 0 | 0 | 11 | 33 | 20 | 0 | 10 | 24 | 0 | 0 | 9 | 27 | 16 |
| 1 | 45 | 0 | 13 | 7 | 30 | 0 | 11 | 40 | 0 | 0 | 10 | 30 | 0 | 0 | 9 | 32 | 44 |
| 1 | 46 | 0 | 13 | 15 | 0 | 0 | 11 | 46 | 40 | 0 | 10 | 36 | 0 | 0 | 9 | 38 | 11 |
| 1 | 47 | 0 | 13 | 22 | 30 | 0 | 11 | 53 | 20 | 0 | 10 | 42 | 0 | 0 | 9 | 43 | 38 |
| 1 | 48 | 0 | 13 | 30 | 0 | 0 | 12 | 0 | 0 | 0 | 10 | 48 | 0 | 0 | 9 | 49 | 5 |
| 1 | 49 | 0 | 13 | 37 | 30 | 0 | 12 | 6 | 40 | 0 | 10 | 54 | 0 | 0 | 9 | 54 | 33 |
| 1 | 50 | 0 | 13 | 45 | 0 | 0 | 12 | 13 | 20 | 0 | 11 | 0 | 0 | 0 | 10 | 0 | 0 |
| 1 | 51 | 0 | 13 | 52 | 30 | 0 | 12 | 20 | 0 | 0 | 11 | 6 | 0 | 0 | 10 | 5 | 27 |
| 1 | 52 | 0 | 14 | 0 | 0 | 0 | 12 | 26 | 40 | 0 | 11 | 12 | 0 | 0 | 10 | 10 | 54 |
| 1 | 53 | 0 | 14 | 7 | 30 | 0 | 12 | 33 | 20 | 0 | 11 | 18 | 0 | 0 | 10 | 16 | 22 |
| 1 | 54 | 0 | 14 | 15 | 0 | 0 | 12 | 40 | 0 | 0 | 11 | 24 | 0 | 0 | 10 | 21 | 49 |
| 1 | 55 | 0 | 14 | 22 | 30 | 0 | 12 | 46 | 40 | 0 | 11 | 30 | 0 | 0 | 10 | 27 | 16 |
| 1 | 56 | 0 | 14 | 30 | 0 | 0 | 12 | 53 | 20 | 0 | 11 | 36 | 0 | 0 | 10 | 32 | 44 |
| 1 | 57 | 0 | 14 | 37 | 30 | 0 | 13 | 0 | 0 | 0 | 11 | 42 | 0 | 0 | 10 | 38 | 11 |
| 1 | 58 | 0 | 14 | 45 | 0 | 0 | 13 | 6 | 40 | 0 | 11 | 48 | 0 | 0 | 10 | 43 | 38 |
| 1 | 59 | 0 | 14 | 52 | 30 | 0 | 13 | 13 | 20 | 0 | 11 | 54 | 0 | 0 | 10 | 49 | 5 |
| 2 | 0 | 0 | 15 | 0 | 0 | 0 | 13 | 20 | 0 | 0 | 12 | 0 | 0 | 0 | 10 | 54 | 33 |

| Dra | | Octava dies | | | | Nona dies | | | | Decima dies | | | | Undecima dies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | m | S | m | 2 | 3 | S | m | 2 | 3 | S | m | 2 | 3 | S | m | 2 | 3 |
| 2 | 1 | 0 | 15 | 7 | 30 | 0 | 13 | 26 | 40 | 0 | 12 | 6 | 0 | 0 | 11 | 0 | 0 |
| 2 | 2 | 0 | 15 | 15 | 0 | 0 | 13 | 33 | 20 | 0 | 12 | 12 | 0 | 0 | 11 | 5 | 27 |
| 2 | 3 | 0 | 15 | 22 | 30 | 0 | 13 | 40 | 0 | 0 | 12 | 18 | 0 | 0 | 11 | 10 | 54 |
| 2 | 4 | 0 | 15 | 30 | 0 | 0 | 13 | 46 | 40 | 0 | 12 | 24 | 0 | 0 | 11 | 16 | 22 |
| 2 | 5 | 0 | 15 | 37 | 30 | 0 | 13 | 53 | 20 | 0 | 12 | 30 | 0 | 0 | 11 | 21 | 49 |
| 2 | 6 | 0 | 15 | 45 | 0 | 0 | 14 | 0 | 0 | 0 | 12 | 36 | 0 | 0 | 11 | 27 | 16 |
| 2 | 7 | 0 | 15 | 52 | 30 | 0 | 14 | 6 | 40 | 0 | 12 | 42 | 0 | 0 | 11 | 32 | 44 |
| 2 | 8 | 0 | 16 | 0 | 0 | 0 | 14 | 13 | 20 | 0 | 12 | 48 | 0 | 0 | 11 | 38 | 11 |
| 2 | 9 | 0 | 16 | 7 | 30 | 0 | 14 | 20 | 0 | 0 | 12 | 54 | 0 | 0 | 11 | 43 | 38 |
| 2 | 10 | 0 | 16 | 15 | 0 | 0 | 14 | 26 | 40 | 0 | 13 | 0 | 0 | 0 | 11 | 49 | 5 |
| 2 | 11 | 0 | 16 | 22 | 30 | 0 | 14 | 33 | 20 | 0 | 13 | 6 | 0 | 0 | 11 | 54 | 33 |
| 2 | 12 | 0 | 16 | 30 | 0 | 0 | 14 | 40 | 0 | 0 | 13 | 12 | 0 | 0 | 12 | 0 | 0 |
| 2 | 13 | 0 | 16 | 37 | 30 | 0 | 14 | 46 | 40 | 0 | 13 | 18 | 0 | 0 | 12 | 5 | 27 |
| 2 | 14 | 0 | 16 | 45 | 0 | 0 | 14 | 53 | 20 | 0 | 13 | 24 | 0 | 0 | 12 | 10 | 54 |
| 2 | 15 | 0 | 16 | 52 | 30 | 0 | 15 | 0 | 0 | 0 | 13 | 30 | 0 | 0 | 12 | 16 | 22 |
| 2 | 16 | 0 | 17 | 0 | 0 | 0 | 15 | 6 | 40 | 0 | 13 | 36 | 0 | 0 | 12 | 21 | 49 |
| 2 | 17 | 0 | 17 | 7 | 30 | 0 | 15 | 13 | 20 | 0 | 13 | 42 | 0 | 0 | 12 | 27 | 16 |
| 2 | 18 | 0 | 17 | 15 | 0 | 0 | 15 | 20 | 0 | 0 | 13 | 48 | 0 | 0 | 12 | 32 | 44 |
| 2 | 19 | 0 | 17 | 22 | 30 | 0 | 15 | 26 | 40 | 0 | 13 | 54 | 0 | 0 | 12 | 38 | 11 |
| 2 | 20 | 0 | 17 | 30 | 0 | 0 | 15 | 33 | 20 | 0 | 14 | 0 | 0 | 0 | 12 | 43 | 38 |
| 2 | 21 | 0 | 17 | 37 | 30 | 0 | 15 | 40 | 0 | 0 | 14 | 6 | 0 | 0 | 12 | 49 | 5 |
| 2 | 22 | 0 | 17 | 45 | 0 | 0 | 15 | 46 | 40 | 0 | 14 | 12 | 0 | 0 | 12 | 54 | 33 |
| 2 | 23 | 0 | 17 | 52 | 30 | 0 | 15 | 53 | 20 | 0 | 14 | 18 | 0 | 0 | 13 | 0 | 0 |
| 2 | 24 | 0 | 18 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 14 | 24 | 0 | 0 | 13 | 5 | 27 |
| 2 | 25 | 0 | 18 | 7 | 30 | 0 | 16 | 6 | 40 | 0 | 14 | 30 | 0 | 0 | 13 | 10 | 54 |
| 2 | 26 | 0 | 18 | 15 | 0 | 0 | 16 | 13 | 20 | 0 | 14 | 36 | 0 | 0 | 13 | 16 | 22 |
| 2 | 27 | 0 | 18 | 22 | 30 | 0 | 16 | 20 | 0 | 0 | 14 | 42 | 0 | 0 | 13 | 21 | 49 |
| 2 | 28 | 0 | 18 | 30 | 0 | 0 | 16 | 26 | 40 | 0 | 14 | 48 | 0 | 0 | 13 | 27 | 16 |
| 2 | 29 | 0 | 18 | 37 | 30 | 0 | 16 | 33 | 20 | 0 | 14 | 54 | 0 | 0 | 13 | 32 | 44 |
| 2 | 30 | 0 | 18 | 45 | 0 | 0 | 16 | 40 | 0 | 0 | 15 | 0 | 0 | 0 | 13 | 38 | 11 |
| 2 | 31 | 0 | 18 | 52 | 30 | 0 | 16 | 46 | 40 | 0 | 15 | 6 | 0 | 0 | 13 | 43 | 38 |
| 2 | 32 | 0 | 19 | 0 | 0 | 0 | 16 | 53 | 20 | 0 | 15 | 12 | 0 | 0 | 13 | 49 | 5 |
| 2 | 33 | 0 | 19 | 7 | 30 | 0 | 17 | 0 | 0 | 0 | 15 | 18 | 0 | 0 | 13 | 54 | 33 |
| 2 | 34 | 0 | 19 | 15 | 0 | 0 | 17 | 6 | 40 | 0 | 15 | 24 | 0 | 0 | 14 | 0 | 0 |
| 2 | 35 | 0 | 19 | 22 | 30 | 0 | 17 | 13 | 20 | 0 | 15 | 30 | 0 | 0 | 14 | 5 | 27 |
| 2 | 36 | 0 | 19 | 30 | 0 | 0 | 17 | 20 | 0 | 0 | 15 | 36 | 0 | 0 | 14 | 10 | 54 |
| 2 | 37 | 0 | 19 | 37 | 30 | 0 | 17 | 26 | 40 | 0 | 15 | 42 | 0 | 0 | 14 | 16 | 22 |
| 2 | 38 | 0 | 19 | 45 | 0 | 0 | 17 | 33 | 20 | 0 | 15 | 48 | 0 | 0 | 14 | 21 | 49 |
| 2 | 39 | 0 | 19 | 52 | 30 | 0 | 17 | 40 | 0 | 0 | 15 | 54 | 0 | 0 | 14 | 27 | 16 |
| 2 | 40 | 0 | 20 | 0 | 0 | 0 | 17 | 46 | 40 | 0 | 16 | 0 | 0 | 0 | 14 | 32 | 44 |
| 2 | 41 | 0 | 20 | 7 | 30 | 0 | 17 | 53 | 20 | 0 | 16 | 6 | 0 | 0 | 14 | 38 | 11 |
| 2 | 42 | 0 | 20 | 15 | 0 | 0 | 18 | 0 | 0 | 0 | 16 | 12 | 0 | 0 | 14 | 43 | 38 |
| 2 | 43 | 0 | 20 | 22 | 30 | 0 | 18 | 6 | 40 | 0 | 16 | 18 | 0 | 0 | 14 | 49 | 5 |
| 2 | 44 | 0 | 20 | 30 | 0 | 0 | 18 | 13 | 20 | 0 | 16 | 24 | 0 | 0 | 14 | 54 | 33 |
| 2 | 45 | 0 | 20 | 37 | 30 | 0 | 18 | 20 | 0 | 0 | 16 | 30 | 0 | 0 | 15 | 0 | 0 |
| 2 | 46 | 0 | 20 | 45 | 0 | 0 | 18 | 26 | 40 | 0 | 16 | 36 | 0 | 0 | 15 | 5 | 27 |
| 2 | 47 | 0 | 20 | 52 | 30 | 0 | 18 | 33 | 20 | 0 | 16 | 42 | 0 | 0 | 15 | 10 | 54 |
| 2 | 48 | 0 | 21 | 0 | 0 | 0 | 18 | 40 | 0 | 0 | 16 | 48 | 0 | 0 | 15 | 16 | 22 |
| 2 | 49 | 0 | 21 | 7 | 30 | 0 | 18 | 46 | 40 | 0 | 16 | 54 | 0 | 0 | 15 | 21 | 49 |
| 2 | 50 | 0 | 21 | 15 | 0 | 0 | 18 | 53 | 20 | 0 | 17 | 0 | 0 | 0 | 15 | 27 | 16 |
| 2 | 51 | 0 | 21 | 22 | 30 | 0 | 19 | 0 | 0 | 0 | 17 | 6 | 0 | 0 | 15 | 32 | 44 |
| 2 | 52 | 0 | 21 | 30 | 0 | 0 | 19 | 6 | 40 | 0 | 17 | 12 | 0 | 0 | 15 | 38 | 11 |
| 2 | 53 | 0 | 21 | 37 | 30 | 0 | 19 | 13 | 20 | 0 | 17 | 18 | 0 | 0 | 15 | 43 | 38 |
| 2 | 54 | 0 | 21 | 45 | 0 | 0 | 19 | 20 | 0 | 0 | 17 | 24 | 0 | 0 | 15 | 49 | 5 |
| 2 | 55 | 0 | 21 | 52 | 30 | 0 | 19 | 26 | 40 | 0 | 17 | 30 | 0 | 0 | 15 | 54 | 33 |
| 2 | 56 | 0 | 22 | 0 | 0 | 0 | 19 | 33 | 20 | 0 | 17 | 36 | 0 | 0 | 16 | 0 | 0 |
| 2 | 57 | 0 | 22 | 7 | 30 | 0 | 19 | 40 | 0 | 0 | 17 | 42 | 0 | 0 | 16 | 5 | 27 |
| 2 | 58 | 0 | 22 | 15 | 0 | 0 | 19 | 46 | 40 | 0 | 17 | 48 | 0 | 0 | 16 | 10 | 54 |
| 2 | 59 | 0 | 22 | 22 | 30 | 0 | 19 | 53 | 20 | 0 | 17 | 54 | 0 | 0 | 16 | 16 | 22 |
| 3 | 0 | 0 | 22 | 30 | 0 | 0 | 20 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 16 | 21 | 49 |

## Tabula ad inveniendum motum ☉ et ☽ in una hora:

| Gradus signi | 0 Motus ☉ in hora m | 2 | Motus ☽ in una hora m | 2 | 1 Motus ☉ in hora m | 2 | Motus ☽ in una hora m | 2 | 2 Motus solis in hora m | 2 | Motus ☽ in una hora m | 2 | 3 Motus solis in hora m | 2 | Motus lune in hora m | 2 | 4 Motus solis in hora m | 2 | Motus ☽ in una hora m | 2 | 5 Motus ☉ in hora m | 2 | Motus ☽ in una hora m | 2 | Gradus signi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 23 | 29 | 31 | 2 | 24 | 30 | 0 | 2 | 25 | 31 | 4 | 2 | 28 | 32 | 43 | 2 | 31 | 34 | 39 | 2 | 33 | 36 | 17 | 29 |
| 2 | 2 | 23 | 29 | 37 | 2 | 24 | 30 | 2 | 2 | 25 | 31 | 6 | 2 | 28 | 32 | 48 | 2 | 31 | 34 | 43 | 2 | 33 | 36 | 19 | 28 |
| 3 | 2 | 23 | 29 | 38 | 2 | 24 | 30 | 4 | 2 | 26 | 31 | 11 | 2 | 28 | 32 | 52 | 2 | 31 | 34 | 48 | 2 | 33 | 36 | 21 | 27 |
| 4 | 2 | 23 | 29 | 38 | 2 | 24 | 30 | 6 | 2 | 26 | 31 | 13 | 2 | 28 | 32 | 56 | 2 | 31 | 34 | 51 | 2 | 33 | 36 | 23 | 26 |
| 5 | 2 | 23 | 29 | 39 | 2 | 24 | 30 | 7 | 2 | 26 | 31 | 16 | 2 | 28 | 32 | 59 | 2 | 31 | 34 | 55 | 2 | 33 | 36 | 25 | 25 |
| 6 | 2 | 23 | 29 | 39 | 2 | 24 | 30 | 9 | 2 | 26 | 31 | 19 | 2 | 28 | 33 | 4 | 2 | 31 | 34 | 58 | 2 | 33 | 36 | 28 | 24 |
| 7 | 2 | 23 | 29 | 39 | 2 | 24 | 30 | 11 | 2 | 26 | 31 | 22 | 2 | 28 | 33 | 8 | 2 | 31 | 35 | 0 | 2 | 33 | 36 | 29 | 23 |
| 8 | 2 | 23 | 29 | 39 | 2 | 24 | 30 | 13 | 2 | 26 | 31 | 26 | 2 | 28 | 33 | 11 | 2 | 31 | 35 | 3 | 2 | 33 | 36 | 31 | 22 |
| 9 | 2 | 23 | 29 | 39 | 2 | 24 | 30 | 14 | 2 | 26 | 31 | 29 | 2 | 29 | 33 | 13 | 2 | 31 | 35 | 9 | 2 | 33 | 36 | 33 | 21 |
| 10 | 2 | 23 | 29 | 40 | 2 | 24 | 30 | 16 | 2 | 26 | 31 | 32 | 2 | 29 | 33 | 16 | 2 | 31 | 35 | 12 | 2 | 33 | 36 | 34 | 20 |
| 11 | 2 | 23 | 29 | 41 | 2 | 24 | 30 | 18 | 2 | 26 | 31 | 35 | 2 | 29 | 33 | 20 | 2 | 31 | 35 | 16 | 2 | 33 | 36 | 34 | 19 |
| 12 | 2 | 23 | 29 | 41 | 2 | 24 | 30 | 20 | 2 | 26 | 31 | 38 | 2 | 29 | 33 | 24 | 2 | 31 | 35 | 19 | 2 | 33 | 36 | 38 | 18 |
| 13 | 2 | 23 | 29 | 42 | 2 | 24 | 30 | 22 | 2 | 26 | 31 | 41 | 2 | 29 | 33 | 28 | 2 | 32 | 35 | 23 | 2 | 33 | 36 | 39 | 17 |
| 14 | 2 | 23 | 29 | 42 | 2 | 24 | 30 | 24 | 2 | 26 | 31 | 44 | 2 | 29 | 33 | 33 | 2 | 32 | 35 | 26 | 2 | 33 | 36 | 41 | 16 |
| 15 | 2 | 23 | 29 | 42 | 2 | 24 | 30 | 25 | 2 | 26 | 31 | 47 | 2 | 29 | 33 | 38 | 2 | 32 | 35 | 30 | 2 | 33 | 36 | 43 | 15 |
| 16 | 2 | 23 | 29 | 43 | 2 | 25 | 30 | 28 | 2 | 27 | 31 | 50 | 2 | 29 | 33 | 42 | 2 | 32 | 35 | 33 | 2 | 33 | 36 | 44 | 14 |
| 17 | 2 | 23 | 29 | 44 | 2 | 25 | 30 | 30 | 2 | 27 | 31 | 56 | 2 | 29 | 33 | 44 | 2 | 32 | 35 | 31 | 2 | 33 | 36 | 45 | 13 |
| 18 | 2 | 23 | 29 | 45 | 2 | 25 | 30 | 32 | 2 | 27 | 31 | 59 | 2 | 29 | 33 | 49 | 2 | 32 | 35 | 39 | 2 | 33 | 36 | 46 | 12 |
| 19 | 2 | 23 | 29 | 46 | 2 | 25 | 30 | 34 | 2 | 27 | 32 | 1 | 2 | 29 | 33 | 53 | 2 | 32 | 35 | 42 | 2 | 33 | 36 | 47 | 11 |
| 20 | 2 | 23 | 29 | 47 | 2 | 25 | 30 | 35 | 2 | 27 | 32 | 5 | 2 | 29 | 33 | 56 | 2 | 32 | 35 | 46 | 2 | 34 | 36 | 48 | 10 |
| 21 | 2 | 23 | 29 | 48 | 2 | 25 | 30 | 39 | 2 | 27 | 32 | 8 | 2 | 29 | 34 | 1 | 2 | 32 | 35 | 49 | 2 | 34 | 36 | 49 | 9 |
| 22 | 2 | 23 | 29 | 48 | 2 | 25 | 30 | 42 | 2 | 27 | 32 | 10 | 2 | 29 | 34 | 5 | 2 | 32 | 35 | 52 | 2 | 34 | 36 | 50 | 8 |
| 23 | 2 | 23 | 29 | 50 | 2 | 25 | 30 | 44 | 2 | 27 | 32 | 13 | 2 | 29 | 34 | 7 | 2 | 32 | 35 | 56 | 2 | 34 | 36 | 41 | 7 |
| 24 | 2 | 23 | 29 | 51 | 2 | 25 | 30 | 47 | 2 | 27 | 32 | 15 | 2 | 30 | 34 | 10 | 2 | 32 | 36 | 0 | 2 | 34 | 36 | 41 | 6 |
| 25 | 2 | 23 | 29 | 52 | 2 | 25 | 30 | 49 | 2 | 27 | 32 | 22 | 2 | 30 | 34 | 14 | 2 | 32 | 36 | 3 | 2 | 34 | 36 | 41 | 5 |
| 26 | 2 | 23 | 29 | 53 | 2 | 25 | 30 | 50 | 2 | 27 | 32 | 26 | 2 | 30 | 34 | 19 | 2 | 32 | 36 | 6 | 2 | 34 | 36 | 41 | 4 |
| 27 | 2 | 24 | 29 | 55 | 2 | 25 | 30 | 54 | 2 | 28 | 32 | 29 | 2 | 30 | 34 | 24 | 2 | 32 | 36 | 9 | 2 | 34 | 36 | 42 | 3 |
| 28 | 2 | 24 | 29 | 57 | 2 | 25 | 30 | 57 | 2 | 28 | 32 | 32 | 2 | 30 | 34 | 30 | 2 | 32 | 36 | 12 | 2 | 34 | 36 | 42 | 2 |
| 29 | 2 | 24 | 29 | 57 | 2 | 25 | 31 | 0 | 2 | 28 | 32 | 36 | 2 | 30 | 34 | 38 | 2 | 33 | 36 | 14 | 2 | 34 | 36 | 43 | 1 |
| 30 | 2 | 24 | 29 | 59 | 2 | 25 | 31 | 3 | 2 | 28 | 32 | 40 | 2 | 30 | 34 | [illegible] | 2 | 33 | 36 | 18 | 2 | 34 | 36 | 43 | 0 |
| | | 11 | | | | 10 | | | | 9 | | | | 8 | | | | 7 | | | | 6 | | | |

## Tabula equacionum dierum cum noctibus:

| Gradus | Equacio dierum ♑ g | m | Equacio dierum Aquarius g | m | Equacio dierum ♓ g | m | Equacio dierum Aries g | m | Equacio dierum ♉ g | m | Equacio dierum Gemini g | m | Equacio dierum ♋ g | m | Equacio dierum Leo g | m | Equacio dierum ♍ g | m | Equacio dierum Libra g | m | Equacio dierum ♏ g | m | Equacio dierum Sagittarius g | m | Gradus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 46 | 0 | 38 | 0 | 9 | 2 | 7 | 4 | 33 | 5 | 10 | 4 | 4 | 2 | 51 | 3 | 43 | 6 | 5 | 7 | 53 | 7 | 5 | 1 |
| 2 | 3 | 37 | 0 | 34 | 0 | 11 | 2 | 12 | 4 | 36 | 5 | 11 | 4 | 1 | 2 | 50 | 3 | 47 | 6 | 10 | 7 | 54 | 7 | 0 | 2 |
| 3 | 3 | 29 | 0 | 31 | 0 | 13 | 2 | 17 | 4 | 39 | 5 | 14 | 3 | 50 | 2 | 50 | 3 | 51 | 6 | 15 | 7 | 54 | 6 | 55 | 3 |
| 4 | 3 | 22 | 0 | 27 | 0 | 14 | 2 | 22 | 4 | 43 | 5 | 14 | 3 | 54 | 2 | 50 | 3 | 55 | 6 | 20 | 7 | 55 | 6 | 50 | 4 |
| 5 | 3 | 14 | 0 | 23 | 0 | 18 | 2 | 27 | 4 | 46 | 5 | 13 | 3 | 50 | 2 | 49 | 3 | 59 | 6 | 25 | 7 | 55 | 6 | 45 | 5 |
| 6 | 3 | 7 | 0 | 21 | 0 | 21 | 2 | 31 | 4 | 49 | 5 | 12 | 3 | 41 | 2 | 50 | 4 | 4 | 6 | 30 | 7 | 56 | 6 | 40 | 6 |
| 7 | 3 | 0 | 0 | 19 | 0 | 23 | 2 | 36 | 4 | 53 | 5 | 10 | 3 | 44 | 2 | 51 | 4 | 8 | 6 | 35 | 7 | 56 | 6 | 34 | 7 |
| 8 | 2 | 52 | 0 | 16 | 0 | 26 | 2 | 42 | 4 | 56 | 5 | 8 | 3 | 40 | 2 | 51 | 4 | 12 | 6 | 40 | 7 | 57 | 6 | 28 | 8 |
| 9 | 2 | 45 | 0 | 14 | 0 | 30 | 2 | 46 | 4 | 58 | 5 | 6 | 3 | 38 | 2 | 52 | 4 | 17 | 6 | 44 | 7 | 57 | 6 | 22 | 9 |
| 10 | 2 | 38 | 0 | 12 | 0 | 33 | 2 | 51 | 5 | 1 | 5 | 4 | 3 | 34 | 2 | 52 | 4 | 22 | 6 | 48 | 7 | 56 | 6 | 16 | 10 |
| 11 | 2 | 31 | 0 | 10 | 0 | 37 | 2 | 59 | 5 | 3 | 5 | 1 | 3 | 32 | 2 | 54 | 4 | 26 | 6 | 53 | 7 | 56 | 6 | 10 | 11 |
| 12 | 2 | 24 | 0 | 8 | 0 | 40 | 3 | 4 | 5 | 6 | 4 | 59 | 3 | 28 | 2 | 56 | 4 | 31 | 6 | 57 | 7 | 55 | 6 | 2 | 12 |
| 13 | 2 | 17 | 0 | 6 | 0 | 44 | 3 | 9 | 5 | 9 | 4 | 57 | 3 | 24 | 2 | 58 | 4 | 36 | 7 | 1 | 7 | 55 | 5 | 58 | 13 |
| 14 | 2 | 10 | 0 | 4 | 0 | 48 | 3 | 14 | 5 | 10 | 4 | 55 | 3 | 22 | 2 | 58 | 4 | 40 | 7 | 5 | 7 | 54 | 5 | 52 | 14 |
| 15 | 2 | 3 | 0 | 3 | 0 | 52 | 3 | 21 | 5 | 12 | 4 | 52 | 3 | 19 | 3 | 0 | 4 | 45 | 7 | 8 | 7 | 53 | 5 | 45 | 15 |
| 16 | 1 | 57 | 0 | 2 | 0 | 56 | 3 | 21 | 5 | 14 | 4 | 49 | 3 | 16 | 3 | 2 | 4 | 40 | 7 | 12 | 7 | 51 | 5 | 38 | 16 |
| 17 | 1 | 51 | 0 | 1 | 1 | 3 | 3 | 31 | 5 | 14 | 4 | 46 | 3 | 13 | 3 | 5 | 4 | 50 | 7 | 16 | 7 | 50 | 5 | 30 | 17 |
| 18 | 1 | 45 | 0 | 0 | 1 | 5 | 3 | 36 | 5 | 17 | 4 | 43 | 3 | 12 | 3 | 7 | 5 | 3 | 7 | 20 | 7 | 48 | 5 | 23 | 18 |
| 19 | 1 | 39 | 0 | 0 | 1 | 9 | 3 | 40 | 5 | 18 | 4 | 40 | 3 | 9 | 3 | 9 | 5 | 6 | 7 | 23 | 7 | 46 | 5 | 16 | 19 |
| 20 | 1 | 33 | 0 | 0 | 1 | 14 | 3 | 45 | 5 | 19 | 4 | 37 | 3 | 7 | 3 | 14 | 5 | 10 | 7 | 26 | 7 | 44 | 5 | 9 | 20 |
| 21 | 1 | 27 | 0 | 0 | 1 | 19 | 3 | 50 | 5 | 19 | 4 | 34 | 3 | 5 | 3 | 14 | 5 | 15 | 7 | 29 | 7 | 41 | 5 | 2 | 21 |
| 22 | 1 | 22 | 0 | 0 | 1 | 23 | 3 | 55 | 5 | 20 | 4 | 31 | 3 | 3 | 3 | 17 | 5 | 20 | 7 | 32 | 7 | 38 | 4 | 51 | 22 |
| 23 | 1 | 16 | 0 | 0 | 1 | 28 | 4 | 0 | 5 | 20 | 4 | 28 | 3 | 1 | 3 | 20 | 5 | 25 | 7 | 34 | 7 | 36 | 4 | 46 | 23 |
| 24 | 1 | 10 | 0 | 0 | 1 | 33 | 4 | 4 | 5 | 20 | 4 | 24 | 2 | 59 | 3 | 23 | 5 | 30 | 7 | 38 | 7 | 32 | 4 | 40 | 24 |
| 25 | 1 | 5 | 0 | 0 | 1 | 37 | 4 | 9 | 5 | 21 | 4 | 22 | 2 | 57 | 3 | 26 | 5 | 35 | 7 | 41 | 7 | 28 | 4 | 32 | 25 |
| 26 | 1 | 1 | 0 | 1 | 1 | 42 | 4 | 13 | 5 | 21 | 4 | 19 | 2 | 56 | 3 | 29 | 5 | 40 | 7 | 43 | 7 | 24 | 4 | 24 | 26 |
| 27 | 0 | 57 | 0 | 1 | 1 | 47 | 4 | 17 | 5 | 21 | 4 | 16 | 2 | 54 | 3 | 31 | 5 | 44 | 7 | 45 | 7 | 21 | 4 | 15 | 27 |
| 28 | 0 | 53 | 0 | 3 | 1 | 52 | 4 | 21 | 5 | 20 | 4 | 13 | 2 | 51 | 3 | 33 | 5 | 50 | 7 | 47 | 7 | 17 | 4 | 6 | 28 |
| 29 | 0 | 47 | 0 | 4 | 1 | 57 | 4 | 25 | 5 | 20 | 4 | 10 | 2 | 53 | 3 | 35 | 5 | 55 | 7 | 48 | 7 | 14 | 4 | 2 | 29 |
| 30 | 0 | 42 | 0 | 6 | 2 | 2 | 4 | 29 | 5 | 20 | 4 | 7 | 2 | 52 | 3 | 37 | 6 | 0 | 7 | 51 | 7 | 10 | 3 | 48 | 30 |

# Tabula ascensionum signorum in circulo recto

| | 9 | | 10 | | 11 | | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gradus circuli | Capricornus ascensiones | | ♒ ascensiones | | Pisces ascensiones | | ♈ ascensiones | | Taurus ascensiones | | ♊ ascensiones | | Cancer ascensiones | | ♌ ascensiones | | Virgo ascensiones | | ♎ ascensiones | | Scorpio ascensiones | | ♐ ascensiones | | Gradus circuli |
| G | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G |
| 1 | 1 | 6 | 33 | 11 | 63 | 4 | 90 | 55 | 118 | 50 | 148 | 50 | 181 | 6 | 213 | 17 | 243 | 4 | 270 | 55 | 298 | 50 | 328 | 50 | 1 |
| 2 | 2 | 11 | 34 | 14 | 64 | 1 | 91 | 50 | 119 | 48 | 149 | 43 | 182 | 11 | 214 | 14 | 244 | 1 | 271 | 50 | 299 | 48 | 329 | 43 | 2 |
| 3 | 3 | 17 | 35 | 19 | 64 | 48 | 92 | 45 | 120 | 46 | 150 | 40 | 183 | 17 | 215 | 19 | 244 | 48 | 272 | 45 | 300 | 46 | 330 | 40 | 3 |
| 4 | 4 | 22 | 36 | 21 | 65 | 44 | 93 | 40 | 121 | 44 | 151 | 39 | 184 | 22 | 216 | 21 | 245 | 44 | 273 | 40 | 301 | 44 | 331 | 39 | 4 |
| 5 | 5 | 28 | 37 | 23 | 66 | 42 | 94 | 37 | 122 | 42 | 153 | 2 | 185 | 28 | 217 | 23 | 246 | 42 | 274 | 37 | 302 | 42 | 333 | 2 | 5 |
| 6 | 6 | 33 | 38 | 26 | 67 | 44 | 95 | 30 | 123 | 40 | 154 | 7 | 186 | 33 | 218 | 26 | 247 | 44 | 275 | 30 | 303 | 40 | 334 | 7 | 6 |
| 7 | 7 | 38 | 39 | 26 | 68 | 44 | 96 | 27 | 124 | 38 | 155 | 9 | 187 | 38 | 219 | 26 | 248 | 44 | 276 | 27 | 304 | 38 | 335 | 9 | 7 |
| 8 | 8 | 43 | 40 | 31 | 69 | 41 | 97 | 20 | 125 | 36 | 156 | 13 | 188 | 43 | 220 | 31 | 249 | 41 | 277 | 20 | 305 | 36 | 336 | 13 | 8 |
| 9 | 9 | 48 | 41 | 28 | 70 | 37 | 98 | 16 | 126 | 34 | 157 | 11 | 189 | 48 | 221 | 28 | 250 | 37 | 278 | 16 | 306 | 34 | 337 | 11 | 9 |
| 10 | 10 | 53 | 42 | 29 | 71 | 33 | 99 | 11 | 127 | 34 | 158 | 21 | 190 | 53 | 222 | 29 | 251 | 33 | 279 | 11 | 307 | 34 | 338 | 21 | 10 |
| 11 | 11 | 58 | 43 | 29 | 72 | 29 | 100 | 6 | 128 | 33 | 159 | 27 | 191 | 58 | 223 | 29 | 252 | 29 | 280 | 6 | 308 | 33 | 339 | 27 | 11 |
| 12 | 13 | 3 | 44 | 30 | 73 | 24 | 101 | 1 | 129 | 32 | 160 | 29 | 193 | 3 | 224 | 30 | 253 | 24 | 281 | 0 | 309 | 32 | 340 | 29 | 12 |
| 13 | 14 | 8 | 45 | 30 | 74 | 21 | 101 | 51 | 130 | 31 | 161 | 33 | 194 | 8 | 225 | 30 | 254 | 21 | 281 | 51 | 310 | 31 | 341 | 33 | 13 |
| 14 | 15 | 13 | 46 | 30 | 75 | 17 | 102 | 52 | 131 | 30 | 162 | 31 | 195 | 13 | 226 | 30 | 255 | 17 | 282 | 52 | 311 | 30 | 342 | 31 | 14 |
| 15 | 16 | 18 | 47 | 30 | 76 | 12 | 103 | 41 | 132 | 30 | 163 | 42 | 196 | 18 | 227 | 30 | 256 | 12 | 283 | 41 | 312 | 30 | 343 | 42 | 15 |
| 16 | 17 | 23 | 48 | 30 | 77 | 8 | 104 | 43 | 133 | 30 | 164 | 41 | 197 | 23 | 228 | 30 | 257 | 8 | 284 | 43 | 313 | 30 | 344 | 41 | 16 |
| 17 | 18 | 27 | 49 | 29 | 78 | 3 | 105 | 39 | 134 | 30 | 165 | 52 | 198 | 27 | 229 | 29 | 258 | 3 | 285 | 39 | 314 | 30 | 345 | 52 | 17 |
| 18 | 19 | 31 | 50 | 28 | 78 | 49 | 106 | 37 | 135 | 30 | 166 | 51 | 199 | 31 | 230 | 28 | 258 | 49 | 286 | 37 | 315 | 30 | 346 | 51 | 18 |
| 19 | 20 | 34 | 51 | 28 | 79 | 45 | 107 | 31 | 136 | 31 | 168 | 2 | 200 | 34 | 231 | 28 | 259 | 45 | 287 | 31 | 316 | 31 | 348 | 2 | 19 |
| 20 | 21 | 39 | 52 | 26 | 80 | 49 | 108 | 21 | 137 | 30 | 169 | 7 | 201 | 39 | 232 | 26 | 260 | 49 | 288 | 21 | 317 | 30 | 349 | 7 | 20 |
| 21 | 22 | 43 | 53 | 27 | 81 | 44 | 109 | 23 | 138 | 32 | 170 | 12 | 202 | 43 | 233 | 27 | 261 | 44 | 289 | 23 | 318 | 32 | 350 | 12 | 21 |
| 22 | 23 | 47 | 54 | 24 | 82 | 40 | 110 | 19 | 139 | 33 | 171 | 17 | 203 | 47 | 234 | 24 | 262 | 40 | 290 | 19 | 319 | 33 | 351 | 17 | 22 |
| 23 | 24 | 51 | 55 | 22 | 83 | 34 | 111 | 14 | 140 | 34 | 172 | 22 | 204 | 51 | 235 | 22 | 263 | 34 | 291 | 14 | 320 | 34 | 352 | 22 | 23 |
| 24 | 25 | 55 | 56 | 20 | 84 | 30 | 112 | 12 | 141 | 36 | 173 | 27 | 205 | 55 | 236 | 20 | 264 | 30 | 292 | 12 | 321 | 36 | 353 | 27 | 24 |
| 25 | 26 | 58 | 57 | 18 | 85 | 24 | 113 | 8 | 142 | 37 | 174 | 32 | 206 | 58 | 237 | 18 | 265 | 24 | 293 | 8 | 322 | 37 | 354 | 32 | 25 |
| 26 | 28 | 1 | 58 | 16 | 86 | 20 | 114 | 5 | 143 | 39 | 175 | 38 | 208 | 1 | 238 | 16 | 266 | 20 | 294 | 5 | 323 | 39 | 355 | 38 | 26 |
| 27 | 29 | 4 | 59 | 12 | 87 | 14 | 115 | 2 | 144 | 41 | 176 | 43 | 209 | 4 | 239 | 12 | 267 | 14 | 295 | 2 | 324 | 41 | 356 | 43 | 27 |
| 28 | 30 | 7 | 60 | 12 | 88 | 10 | 115 | 59 | 145 | 43 | 177 | 49 | 210 | 7 | 240 | 12 | 268 | 10 | 295 | 59 | 325 | 43 | 357 | 49 | 28 |
| 29 | 31 | 10 | 61 | 10 | 89 | 5 | 116 | 56 | 146 | 45 | 178 | 54 | 211 | 10 | 241 | 10 | 269 | 5 | 296 | 56 | 326 | 45 | 358 | 54 | 29 |
| 30 | 32 | 13 | 62 | 7 | 90 | 0 | 117 | 53 | 147 | 47 | 180 | 0 | 212 | 13 | 242 | 7 | 270 | 0 | 297 | 53 | 327 | 47 | 360 | 0 | 30 |

# Tabula ascensionum signorum vltra medium Ami climate

| Gradus | Aries ascensiones | | partes horarum | | Taurus ascensiones | | partes hora | | Gemini ascensiones | | partes hora | | Cancer ascensiones | | partes horarum | | Leo ascensiones | | partes hora | | Virgo ascensiones | | partes horarum | | Gradus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G |
| 1 | 0 | 20 | 15 | 4 | 14 | 16 | 17 | 20 | 32 | 24 | 19 | 22 | 59 | 10 | 20 | 13 | 97 | 40 | 19 | 14 | 139 | 24 | 17 | 15 | 1 |
| 2 | 0 | 42 | 15 | 10 | 14 | 41 | 17 | 30 | 33 | 29 | 19 | 25 | 61 | 0 | 20 | 12 | 99 | 12 | 19 | 11 | 140 | 48 | 17 | 13 | 2 |
| 3 | 1 | 14 | 15 | 17 | 14 | 19 | 17 | 36 | 34 | 13 | 19 | 28 | 62 | 10 | 20 | 12 | 100 | 34 | 19 | 8 | 142 | 12 | 17 | 7 | 3 |
| 4 | 1 | 44 | 15 | 20 | 17 | 41 | 17 | 38 | 34 | 41 | 19 | 31 | 63 | 20 | 20 | 12 | 101 | 46 | 19 | 5 | 143 | 30 | 17 | 3 | 4 |
| 5 | 2 | 10 | 15 | 26 | 16 | 27 | 17 | 45 | 35 | 51 | 19 | 38 | 64 | 30 | 20 | 11 | 103 | 16 | 19 | 1 | 145 | 0 | 16 | 58 | 5 |
| 6 | 2 | 31 | 15 | 29 | 16 | 44 | 17 | 51 | 36 | 24 | 19 | 35 | 65 | 40 | 20 | 10 | 104 | 40 | 18 | 57 | 146 | 24 | 16 | 56 | 6 |
| 7 | 3 | 4 | 15 | 32 | 17 | 28 | 17 | 57 | 37 | 10 | 19 | 40 | 66 | 50 | 20 | 9 | 106 | 2 | 18 | 55 | 147 | 48 | 16 | 49 | 7 |
| 8 | 3 | 31 | 15 | 39 | 18 | 1 | 17 | 47 | 37 | 44 | 19 | 43 | 68 | 1 | 20 | 8 | 107 | 28 | 18 | 50 | 149 | 12 | 16 | 47 | 8 |
| 9 | 3 | 48 | 15 | 44 | 18 | 38 | 17 | 59 | 38 | 40 | 19 | 44 | 69 | 12 | 20 | 7 | 108 | 51 | 18 | 51 | 150 | 36 | 16 | 40 | 9 |
| 10 | 4 | 24 | 15 | 48 | 19 | 9 | 18 | 5 | 39 | 26 | 19 | 49 | 70 | 23 | 20 | 6 | 110 | 10 | 18 | 43 | 152 | 0 | 16 | 37 | 10 |
| 11 | 4 | 42 | 15 | 53 | 19 | 48 | 18 | 8 | 40 | 13 | 19 | 51 | 71 | 34 | 20 | 4 | 111 | 33 | 18 | 40 | 153 | 24 | 16 | 30 | 11 |
| 12 | 5 | 19 | 15 | 58 | 20 | 21 | 18 | 12 | 41 | 1 | 19 | 55 | 72 | 47 | 20 | 3 | 112 | 46 | 18 | 37 | 154 | 48 | 16 | 30 | 12 |
| 13 | 5 | 41 | 16 | 2 | 20 | 48 | 18 | 16 | 41 | 40 | 19 | 58 | 73 | 59 | 20 | 1 | 114 | 19 | 18 | 32 | 156 | 12 | 16 | 21 | 13 |
| 14 | 6 | 14 | 16 | 7 | 21 | 33 | 18 | 20 | 42 | 26 | 19 | 10 | 75 | 11 | 19 | 59 | 115 | 41 | 18 | 28 | 157 | 36 | 16 | 16 | 14 |
| 15 | 6 | 43 | 16 | 12 | 22 | 9 | 18 | 26 | 43 | 38 | 19 | 15 | 76 | 23 | 19 | 58 | 117 | 4 | 18 | 26 | 159 | 0 | 16 | 12 | 15 |
| 16 | 7 | 11 | 16 | 16 | 22 | 24 | 18 | 28 | 44 | 24 | 19 | 49 | 77 | 36 | 19 | 56 | 118 | 26 | 18 | 26 | 160 | 24 | 16 | 7 | 16 |
| 17 | 7 | 39 | 16 | 21 | 23 | 21 | 18 | 32 | 45 | 28 | 20 | 1 | 78 | 49 | 19 | 53 | 119 | 41 | 18 | 18 | 161 | 48 | 16 | 2 | 17 |
| 18 | 8 | 7 | 16 | 26 | 23 | 41 | 18 | 35 | 46 | 22 | 20 | 3 | 80 | 10 | 19 | 51 | 121 | 18 | 18 | 12 | 163 | 12 | 15 | 58 | 18 |
| 19 | 8 | 34 | 16 | 30 | 24 | 34 | 18 | 40 | 47 | 21 | 20 | 4 | 81 | 28 | 19 | 48 | 122 | 37 | 18 | 8 | 164 | 36 | 15 | 52 | 19 |
| 20 | 9 | 3 | 16 | 34 | 24 | 11 | 18 | 42 | 48 | 24 | 20 | 6 | 82 | 49 | 19 | 45 | 124 | 0 | 18 | 4 | 166 | 0 | 15 | 48 | 20 |
| 21 | 9 | 31 | 16 | 40 | 24 | 49 | 18 | 41 | 49 | 22 | 20 | 7 | 84 | 10 | 19 | 40 | 125 | 28 | 17 | 59 | 167 | 28 | 15 | 44 | 21 |
| 22 | 9 | 49 | 16 | 44 | 26 | 28 | 18 | 50 | 50 | 23 | 20 | 8 | 85 | 32 | 19 | 38 | 126 | 48 | 17 | 55 | 168 | 48 | 15 | 39 | 22 |
| 23 | 10 | 27 | 16 | 49 | 27 | 8 | 18 | 52 | 52 | 24 | 20 | 9 | 86 | 52 | 19 | 35 | 128 | 12 | 17 | 51 | 170 | 12 | 15 | 38 | 23 |
| 24 | 10 | 44 | 16 | 56 | 27 | 49 | 18 | 56 | 52 | 20 | 20 | 10 | 88 | 16 | 19 | 31 | 129 | 36 | 17 | 44 | 171 | 36 | 15 | 29 | 24 |
| 25 | 11 | 23 | 16 | 58 | 28 | 29 | 18 | 59 | 53 | 24 | 20 | 11 | 89 | 38 | 19 | 26 | 131 | 0 | 17 | 41 | 173 | 0 | 15 | 28 | 25 |
| 26 | 11 | 40 | 17 | 3 | 29 | 10 | 19 | 5 | 54 | 30 | 20 | 12 | 91 | 0 | 19 | 31 | 132 | 28 | 17 | 38 | 174 | 24 | 15 | 20 | 26 |
| 27 | 12 | 19 | 17 | 7 | 29 | 52 | 19 | 5 | 55 | 32 | 20 | 12 | 92 | 22 | 19 | 28 | 133 | 48 | 17 | 32 | 175 | 48 | 15 | 19 | 27 |
| 28 | 12 | 58 | 17 | 12 | 30 | 34 | 19 | 11 | 56 | 38 | 20 | 12 | 93 | 44 | 19 | 25 | 134 | 12 | 17 | 30 | 177 | 12 | 15 | 10 | 28 |
| 29 | 13 | 17 | 17 | 16 | 31 | 18 | 19 | 14 | 57 | 36 | 20 | 13 | 94 | 6 | 19 | 22 | 136 | 30 | 17 | 28 | 178 | 36 | 15 | 7 | 29 |
| 30 | 13 | 40 | 17 | 21 | 32 | 1 | 19 | 18 | 58 | 39 | 20 | 13 | 96 | 28 | 19 | 18 | 138 | 0 | 17 | 21 | 180 | 0 | 15 | 0 | 30 |

♈ 0 ♉ 1 ♊ 2 ♋ 3 ♌ 4 ♍ 5 6

## Cuius latitudo est 40 graduum et longior 16 horarum:

| | 6 | | | | 7 | | | | 8 | | | | 9 | | | | 10 | | | | 11 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gradus | Libre ascensiones | | partes horarum | | Scorpionis ascensiones | | partes horarum | | Sagittarii ascensiones | | partes horarum | | Capricorni ascensiones | | partes horarum | | Aquarii ascensiones | | partes horarum | | Pisces ascensiones | | partes horarum | | Gradus |
| G | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | |
| 1 | 181 | 24 | 14 | 55 | 223 | 24 | 12 | 36 | 264 | 54 | 10 | 38 | 302 | 22 | 9 | 41 | 328 | 42 | 10 | 47 | 346 | 43 | 12 | 44 | 1 |
| 2 | 182 | 48 | 14 | 50 | 224 | 48 | 12 | 30 | 266 | 16 | 10 | 34 | 303 | 24 | 9 | 44 | 329 | 24 | 10 | 49 | 347 | 12 | 12 | 48 | 2 |
| 3 | 184 | 12 | 14 | 45 | 226 | 12 | 12 | 26 | 267 | 38 | 10 | 32 | 304 | 21 | 9 | 44 | 330 | 8 | 10 | 42 | 347 | 41 | 12 | 53 | 3 |
| 4 | 185 | 36 | 14 | 40 | 227 | 36 | 12 | 22 | 269 | 0 | 10 | 29 | 305 | 29 | 9 | 48 | 330 | 50 | 10 | 46 | 348 | 9 | 12 | 57 | 4 |
| 5 | 187 | 0 | 14 | 36 | 229 | 0 | 12 | 17 | 270 | 22 | 10 | 25 | 306 | 31 | 9 | 49 | 331 | 31 | 10 | 59 | 348 | 37 | 13 | 1 | 5 |
| 6 | 188 | 24 | 14 | 31 | 230 | 24 | 12 | 13 | 271 | 44 | 10 | 23 | 307 | 33 | 9 | 50 | 332 | 11 | 11 | 3 | 349 | 5 | 13 | 6 | 6 |
| 7 | 189 | 48 | 14 | 26 | 231 | 48 | 12 | 9 | 273 | 6 | 10 | 20 | 308 | 35 | 9 | 51 | 332 | 52 | 11 | 6 | 349 | 33 | 13 | 11 | 7 |
| 8 | 191 | 12 | 14 | 21 | 233 | 12 | 12 | 5 | 274 | 28 | 10 | 17 | 309 | 36 | 9 | 52 | 333 | 32 | 11 | 10 | 350 | 1 | 13 | 15 | 8 |
| 9 | 192 | 36 | 14 | 16 | 234 | 36 | 12 | 1 | 275 | 50 | 10 | 14 | 310 | 37 | 9 | 53 | 334 | 11 | 11 | 13 | 350 | 29 | 13 | 20 | 9 |
| 10 | 194 | 0 | 14 | 12 | 236 | 0 | 11 | 57 | 277 | 12 | 10 | 11 | 311 | 38 | 9 | 54 | 334 | 49 | 11 | 17 | 350 | 57 | 13 | 25 | 10 |
| 11 | 195 | 24 | 14 | 7 | 237 | 23 | 11 | 52 | 278 | 32 | 10 | 9 | 312 | 38 | 9 | 55 | 335 | 26 | 11 | 20 | 351 | 24 | 13 | 30 | 11 |
| 12 | 196 | 48 | 14 | 2 | 238 | 46 | 11 | 48 | 279 | 40 | 10 | 7 | 313 | 37 | 9 | 57 | 336 | 3 | 11 | 24 | 351 | 53 | 13 | 34 | 12 |
| 13 | 198 | 12 | 13 | 58 | 240 | 9 | 11 | 44 | 281 | 6 | 10 | 6 | 314 | 37 | 9 | 59 | 336 | 39 | 11 | 28 | 352 | 21 | 13 | 39 | 13 |
| 14 | 199 | 36 | 13 | 53 | 241 | 32 | 11 | 40 | 282 | 22 | 10 | 4 | 315 | 31 | 10 | 1 | 337 | 17 | 11 | 32 | 352 | 49 | 13 | 44 | 14 |
| 15 | 201 | 0 | 13 | 48 | 242 | 55 | 11 | 36 | 283 | 31 | 10 | 2 | 316 | 26 | 10 | 2 | 337 | 51 | 11 | 36 | 353 | 17 | 13 | 48 | 15 |
| 16 | 202 | 24 | 13 | 44 | 244 | 19 | 11 | 32 | 284 | 54 | 10 | 1 | 317 | 19 | 10 | 4 | 338 | 25 | 11 | 40 | 353 | 45 | 13 | 53 | 16 |
| 17 | 203 | 48 | 13 | 39 | 245 | 41 | 11 | 28 | 286 | 1 | 9 | 59 | 318 | 10 | 10 | 6 | 339 | 2 | 11 | 44 | 354 | 13 | 13 | 58 | 17 |
| 18 | 205 | 12 | 13 | 34 | 247 | 4 | 11 | 24 | 287 | 13 | 9 | 57 | 318 | 49 | 10 | 7 | 339 | 37 | 11 | 48 | 354 | 41 | 14 | 2 | 18 |
| 19 | 206 | 36 | 13 | 30 | 248 | 27 | 11 | 20 | 288 | 24 | 9 | 55 | 319 | 51 | 10 | 9 | 340 | 12 | 11 | 52 | 355 | 8 | 14 | 7 | 19 |
| 20 | 208 | 0 | 13 | 25 | 249 | 50 | 11 | 17 | 289 | 31 | 9 | 54 | 320 | 36 | 10 | 11 | 340 | 45 | 11 | 55 | 355 | 37 | 14 | 12 | 20 |
| 21 | 209 | 24 | 13 | 20 | 251 | 13 | 11 | 13 | 290 | 45 | 9 | 53 | 321 | 20 | 10 | 14 | 341 | 26 | 12 | 1 | 356 | 2 | 14 | 16 | 21 |
| 22 | 210 | 48 | 13 | 15 | 252 | 36 | 11 | 10 | 291 | 49 | 9 | 52 | 322 | 5 | 10 | 17 | 341 | 49 | 12 | 5 | 356 | 29 | 14 | 21 | 22 |
| 23 | 212 | 12 | 13 | 11 | 253 | 58 | 11 | 6 | 293 | 10 | 9 | 51 | 322 | 50 | 10 | 20 | 342 | 32 | 12 | 9 | 356 | 56 | 14 | 26 | 23 |
| 24 | 213 | 36 | 13 | 6 | 255 | 20 | 11 | 3 | 294 | 20 | 9 | 50 | 323 | 33 | 10 | 23 | 343 | 7 | 12 | 13 | 357 | 23 | 14 | 31 | 24 |
| 25 | 215 | 0 | 13 | 1 | 256 | 42 | 10 | 59 | 294 | 30 | 9 | 49 | 324 | 19 | 10 | 26 | 343 | 38 | 12 | 17 | 357 | 50 | 14 | 36 | 25 |
| 26 | 216 | 24 | 12 | 57 | 258 | 4 | 10 | 56 | 296 | 40 | 9 | 48 | 325 | 3 | 10 | 29 | 344 | 9 | 12 | 22 | 358 | 16 | 14 | 40 | 26 |
| 27 | 217 | 48 | 12 | 53 | 259 | 26 | 10 | 52 | 297 | 40 | 9 | 48 | 325 | 41 | 10 | 32 | 344 | 41 | 12 | 26 | 358 | 42 | 14 | 45 | 27 |
| 28 | 219 | 12 | 12 | 48 | 260 | 48 | 10 | 49 | 299 | 0 | 9 | 46 | 326 | 31 | 10 | 34 | 345 | 13 | 12 | 30 | 359 | 8 | 14 | 50 | 28 |
| 29 | 220 | 36 | 12 | 44 | 262 | 10 | 10 | 46 | 300 | 10 | 9 | 41 | 327 | 14 | 10 | 38 | 345 | 44 | 12 | 35 | 359 | 34 | 14 | 55 | 29 |
| 30 | 222 | 0 | 12 | 39 | 263 | 32 | 10 | 42 | 301 | 19 | 9 | 41 | 327 | 49 | 10 | 42 | 346 | 16 | 12 | 39 | 360 | 0 | 15 | 0 | 30 |
| | ♎ | | | | ♏ | | | | ♐ | | | | ♑ | | | | ♒ | | | | ♓ | | | | |

## Tabula ascensionum signorum vltimi (?) Anni climatis cuius latitudo 41 graduum et eius

| | 0 | | | | 1 | | | | 2 | | | | 3 | | | | 4 | | | | 5 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ♈ | | | | ♉ | | | | ♊ | | | | ♋ | | | | ♌ | | | | ♍ | | | | |
| Gradus circuli quadrantes | ascensiones | | partes hore | | ascensiones | | partes horarum | | ascensiones | | partes horarum | | ascensiones | | partes hore | | ascensiones | | partes horarum | | ascensiones | | partes horarum | | Gradus ascensionis |
| | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | |
| 1 | 0 | 24 | 15 | 7 | 13 | 37 | 17 | 33 | 31 | 3 | 19 | 31 | 48 | 1 | 20 | 31 | 96 | 9 | 19 | 31 | 138 | 46 | 17 | 26 | 1 |
| 2 | 0 | 49 | 15 | 10 | 14 | 4 | 17 | 37 | 31 | 41 | 19 | 41 | 49 | 9 | 20 | 30 | 97 | 33 | 19 | 21 | 140 | 12 | 17 | 19 | 2 |
| 3 | 1 | 14 | 15 | 14 | 14 | 34 | 17 | 42 | 32 | 30 | 19 | 44 | 50 | 11 | 20 | 30 | 98 | 46 | 19 | 23 | 141 | 38 | 17 | 13 | 3 |
| 4 | 1 | 40 | 15 | 20 | 15 | 4 | 17 | 51 | 33 | 18 | 19 | 51 | 51 | 27 | 20 | 30 | 100 | 20 | 19 | 20 | 143 | 4 | 17 | 9 | 4 |
| 5 | 2 | 6 | 15 | 25 | 15 | 34 | 17 | 51 | 33 | 48 | 19 | 51 | 52 | 38 | 20 | 29 | 101 | 48 | 19 | 16 | 144 | 30 | 17 | 4 | 5 |
| 6 | 2 | 31 | 15 | 30 | 16 | 4 | 17 | 56 | 34 | 44 | 19 | 56 | 53 | 44 | 20 | 29 | 103 | 8 | 19 | 13 | 145 | 56 | 16 | 59 | 6 |
| 7 | 2 | 56 | 15 | 34 | 16 | 36 | 18 | 0 | 34 | 32 | 19 | 57 | 54 | 46 | 20 | 28 | 104 | 33 | 19 | 7 | 147 | 21 | 16 | 56 | 7 |
| 8 | 3 | 21 | 15 | 40 | 17 | 7 | 18 | 7 | 36 | 18 | 20 | 0 | 55 | 4 | 20 | 27 | 104 | 58 | 19 | 4 | 148 | 46 | 16 | 54 | 8 |
| 9 | 3 | 46 | 15 | 44 | 17 | 38 | 18 | 10 | 37 | 6 | 20 | 3 | 57 | 16 | 20 | 26 | 107 | 23 | 19 | 1 | 150 | 11 | 16 | 44 | 9 |
| 10 | 4 | 12 | 15 | 49 | 18 | 9 | 18 | 18 | 37 | 43 | 20 | 7 | 58 | 24 | 20 | 24 | 108 | 48 | 18 | 57 | 151 | 31 | 16 | 39 | 10 |
| 11 | 4 | 37 | 15 | 55 | 18 | 41 | 18 | 19 | 38 | 44 | 20 | 1 | 59 | 41 | 20 | 23 | 110 | 12 | 18 | 53 | 153 | 2 | 16 | 37 | 11 |
| 12 | 5 | 2 | 16 | 0 | 19 | 17 | 18 | 23 | 39 | 37 | 20 | 9 | 70 | 41 | 20 | 21 | 111 | 31 | 18 | 49 | 154 | 21 | 16 | 30 | 12 |
| 13 | 5 | 28 | 16 | 4 | 19 | 46 | 18 | 27 | 40 | 26 | 20 | 11 | 72 | 13 | 20 | 19 | 113 | 2 | 18 | 47 | 155 | 43 | 16 | 27 | 13 |
| 14 | 5 | 53 | 16 | 10 | 20 | 19 | 18 | 32 | 41 | 11 | 20 | 13 | 73 | 29 | 20 | 17 | 114 | 24 | 18 | 41 | 157 | 18 | 16 | 20 | 14 |
| 15 | 6 | 19 | 16 | 14 | 20 | 52 | 18 | 36 | 42 | 8 | 20 | 14 | 74 | 44 | 20 | 14 | 117 | 42 | 18 | 36 | 158 | 44 | 16 | 14 | 15 |
| 16 | 6 | 44 | 16 | 20 | 21 | 21 | 18 | 41 | 43 | 2 | 20 | 17 | 76 | 1 | 20 | 13 | 117 | 17 | 18 | 32 | 160 | 9 | 16 | 10 | 16 |
| 17 | 7 | 11 | 16 | 24 | 22 | 2 | 18 | 54 | 43 | 46 | 20 | 19 | 77 | 19 | 20 | 11 | 118 | 43 | 18 | 27 | 161 | 36 | 16 | 4 | 17 |
| 18 | 7 | 36 | 16 | 30 | 22 | 38 | 18 | 49 | 44 | 40 | 20 | 21 | 78 | 37 | 20 | 9 | 120 | 9 | 18 | 23 | 162 | 0 | 16 | 0 | 18 |
| 19 | 8 | 2 | 16 | 34 | 23 | 16 | 18 | 53 | 45 | 44 | 20 | 23 | 79 | 42 | 20 | 7 | 121 | 37 | 18 | 19 | 164 | 24 | 15 | 55 | 19 |
| 20 | 8 | 31 | 16 | 39 | 23 | 40 | 18 | 51 | 66 | 39 | 20 | 24 | 81 | 11 | 20 | 5 | 123 | 1 | 18 | 16 | 164 | 50 | 15 | 50 | 20 |
| 21 | 8 | 58 | 16 | 44 | 24 | 21 | 19 | 1 | 67 | 39 | 20 | 26 | 82 | 31 | 20 | 3 | 124 | 26 | 18 | 10 | 166 | 16 | 15 | 47 | 21 |
| 22 | 9 | 27 | 16 | 41 | 27 | 6 | 19 | 7 | 68 | 39 | 20 | 27 | 83 | 41 | 20 | 0 | 127 | 42 | 18 | 7 | 168 | 41 | 15 | 40 | 22 |
| 23 | 9 | 52 | 16 | 48 | 27 | 43 | 19 | 9 | 69 | 39 | 20 | 28 | 84 | 12 | 19 | 57 | 124 | 18 | 18 | 0 | 170 | 6 | 15 | 37 | 23 |
| 24 | 10 | 19 | 16 | 49 | 26 | 20 | 19 | 13 | 70 | 39 | 20 | 29 | 86 | 38 | 19 | 55 | 128 | 44 | 17 | 56 | 171 | 31 | 15 | 30 | 24 |
| 25 | 10 | 44 | 17 | 4 | 26 | 58 | 19 | 16 | 71 | 39 | 20 | 29 | 87 | 48 | 19 | 51 | 130 | 10 | 17 | 51 | 172 | 56 | 15 | 27 | 25 |
| 26 | 11 | 14 | 17 | 9 | 27 | 35 | 19 | 20 | 72 | 41 | 20 | 30 | 89 | 13 | 19 | 51 | 131 | 36 | 17 | 44 | 174 | 21 | 15 | 20 | 26 |
| 27 | 11 | 43 | 17 | 16 | 28 | 19 | 19 | 23 | 73 | 44 | 20 | 30 | 90 | 38 | 19 | 44 | 133 | 2 | 17 | 42 | 175 | 46 | 15 | 17 | 27 |
| 28 | 12 | 11 | 17 | 19 | 28 | 48 | 19 | 27 | 74 | 41 | 20 | 30 | 92 | 0 | 19 | 41 | 134 | 28 | 17 | 31 | 177 | 11 | 15 | 10 | 28 |
| 29 | 12 | 39 | 17 | 26 | 29 | 4 | 19 | 31 | 74 | 49 | 20 | 31 | 93 | 23 | 19 | 37 | 135 | 46 | 17 | 33 | 178 | 36 | 15 | 7 | 29 |
| 30 | 13 | 6 | 17 | 28 | 30 | 20 | 19 | 38 | 76 | 42 | 20 | 31 | 94 | 46 | 19 | 30 | 137 | 20 | 17 | 28 | 180 | 0 | 15 | 0 | 30 |

Dies longior 16 horarum et 27 minutorum ffinis tabule precedentis

| Dies | ♎ |  |  |  | ♏ |  |  |  | ♐ |  |  |  | ♑ |  |  |  | ♒ |  |  |  | ♓ |  |  |  | Gradus equales |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 6 |  |  |  | 7 |  |  |  | 8 |  |  |  | 9 |  |  |  | 10 |  |  |  | 11 |  |  |  |  |
|  | ascensiones |  | partes horarum |  | ascensiones |  | partes horarum |  | ascensiones |  | partes horarum |  | ascensiones |  | partes horarum |  | ascensiones |  | partes horarum |  | ascensiones |  | partes horarum |  |  |
| G | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m | G | m |  |
| 1 | 181 | 25 | 14 | 55 | 224 | 6 | 12 | 27 | 265 | 37 | 10 | 23 | 304 | 11 | 9 | 29 | 330 | 21 | 10 | 29 | 341 | 22 | 12 | 36 | 1 |
| 2 | 182 | 50 | 14 | 51 | 225 | 32 | 12 | 23 | 268 | 0 | 10 | 19 | 305 | 14 | 9 | 30 | 331 | 2 | 10 | 33 | 341 | 50 | 12 | 41 | 2 |
| 3 | 184 | 17 | 14 | 45 | 226 | 58 | 12 | 18 | 269 | 22 | 10 | 16 | 306 | 17 | 9 | 30 | 331 | 42 | 10 | 37 | 344 | 18 | 12 | 46 | 3 |
| 4 | 185 | 40 | 14 | 40 | 228 | 24 | 12 | 13 | 270 | 44 | 10 | 13 | 307 | 19 | 9 | 30 | 332 | 22 | 10 | 40 | 344 | 46 | 12 | 51 | 4 |
| 5 | 187 | 4 | 14 | 35 | 229 | 50 | 12 | 9 | 272 | 6 | 10 | 9 | 308 | 21 | 9 | 31 | 333 | 2 | 10 | 44 | 349 | 13 | 12 | 56 | 5 |
| 6 | 188 | 29 | 14 | 30 | 231 | 16 | 12 | 4 | 273 | 25 | 10 | 6 | 309 | 21 | 9 | 31 | 333 | 40 | 10 | 47 | 349 | 41 | 13 | 1 | 6 |
| 7 | 189 | 54 | 14 | 25 | 232 | 42 | 12 | 0 | 274 | 46 | 10 | 3 | 310 | 21 | 9 | 32 | 334 | 18 | 10 | 51 | 350 | 9 | 13 | 6 | 7 |
| 8 | 191 | 19 | 14 | 20 | 234 | 8 | 11 | 55 | 276 | 7 | 10 | 0 | 311 | 21 | 9 | 33 | 334 | 56 | 10 | 55 | 350 | 36 | 13 | 11 | 8 |
| 9 | 192 | 44 | 14 | 15 | 235 | 34 | 11 | 50 | 277 | 28 | 9 | 57 | 312 | 21 | 9 | 34 | 335 | 33 | 10 | 59 | 351 | 3 | 13 | 16 | 9 |
| 10 | 194 | 10 | 14 | 10 | 236 | 49 | 11 | 46 | 278 | 49 | 9 | 55 | 313 | 21 | 9 | 35 | 336 | 10 | 11 | 3 | 351 | 29 | 13 | 21 | 10 |
| 11 | 195 | 35 | 14 | 5 | 238 | 25 | 11 | 41 | 280 | 7 | 9 | 53 | 314 | 16 | 9 | 37 | 336 | 46 | 11 | 7 | 351 | 56 | 13 | 25 | 11 |
| 12 | 197 | 0 | 14 | 0 | 239 | 51 | 11 | 37 | 281 | 25 | 9 | 51 | 315 | 10 | 9 | 39 | 337 | 22 | 11 | 11 | 352 | 22 | 13 | 30 | 12 |
| 13 | 198 | 26 | 13 | 55 | 241 | 17 | 11 | 33 | 282 | 42 | 9 | 49 | 316 | 4 | 9 | 41 | 337 | 58 | 11 | 15 | 354 | 49 | 13 | 35 | 13 |
| 14 | 199 | 51 | 13 | 50 | 242 | 43 | 11 | 28 | 283 | 59 | 9 | 47 | 316 | 58 | 9 | 43 | 338 | 33 | 11 | 19 | 355 | 15 | 13 | 40 | 14 |
| 15 | 201 | 16 | 13 | 45 | 244 | 8 | 11 | 24 | 285 | 16 | 9 | 45 | 317 | 52 | 9 | 45 | 339 | 8 | 11 | 24 | 355 | 41 | 13 | 45 | 15 |
| 16 | 202 | 42 | 13 | 40 | 245 | 33 | 11 | 19 | 286 | 31 | 9 | 43 | 318 | 43 | 9 | 47 | 339 | 41 | 11 | 28 | 354 | 7 | 13 | 50 | 16 |
| 17 | 204 | 7 | 13 | 35 | 246 | 58 | 11 | 15 | 287 | 48 | 9 | 41 | 319 | 34 | 9 | 49 | 340 | 14 | 11 | 33 | 356 | 33 | 13 | 55 | 17 |
| 18 | 205 | 33 | 13 | 30 | 248 | 23 | 11 | 11 | 289 | 4 | 9 | 39 | 320 | 25 | 9 | 51 | 340 | 47 | 11 | 37 | 356 | 58 | 14 | 0 | 18 |
| 19 | 206 | 58 | 13 | 25 | 249 | 48 | 11 | 7 | 290 | 20 | 9 | 37 | 321 | 16 | 9 | 53 | 341 | 19 | 11 | 41 | 357 | 23 | 14 | 5 | 19 |
| 20 | 208 | 23 | 13 | 21 | 251 | 12 | 11 | 3 | 291 | 34 | 9 | 35 | 322 | 7 | 9 | 55 | 341 | 51 | 11 | 46 | 357 | 48 | 14 | 10 | 20 |
| 21 | 209 | 48 | 13 | 16 | 252 | 37 | 10 | 59 | 292 | 45 | 9 | 34 | 322 | 55 | 9 | 57 | 342 | 22 | 11 | 50 | 356 | 12 | 14 | 15 | 21 |
| 22 | 211 | 13 | 13 | 11 | 254 | 2 | 10 | 55 | 293 | 55 | 9 | 33 | 323 | 43 | 10 | 0 | 342 | 53 | 11 | 55 | 356 | 39 | 14 | 20 | 22 |
| 23 | 212 | 39 | 13 | 6 | 255 | 27 | 10 | 51 | 294 | 4 | 9 | 32 | 324 | 28 | 10 | 3 | 343 | 23 | 12 | 0 | 357 | 4 | 14 | 25 | 23 |
| 24 | 214 | 4 | 13 | 1 | 256 | 52 | 10 | 47 | 296 | 14 | 9 | 31 | 325 | 14 | 10 | 6 | 343 | 55 | 12 | 4 | 357 | 29 | 14 | 30 | 24 |
| 25 | 215 | 29 | 12 | 56 | 258 | 16 | 10 | 44 | 297 | 25 | 9 | 31 | 326 | 2 | 10 | 9 | 344 | 26 | 12 | 9 | 357 | 54 | 14 | 35 | 25 |
| 26 | 216 | 54 | 12 | 51 | 259 | 40 | 10 | 40 | 298 | 35 | 9 | 30 | 326 | 46 | 10 | 13 | 344 | 56 | 12 | 13 | 358 | 20 | 14 | 40 | 26 |
| 27 | 218 | 21 | 12 | 46 | 261 | 4 | 10 | 37 | 299 | 44 | 9 | 30 | 327 | 30 | 10 | 16 | 345 | 26 | 12 | 18 | 358 | 45 | 14 | 45 | 27 |
| 28 | 219 | 47 | 12 | 41 | 262 | 27 | 10 | 33 | 300 | 52 | 9 | 30 | 328 | 14 | 10 | 19 | 345 | 55 | 12 | 23 | 359 | 10 | 14 | 50 | 28 |
| 29 | 221 | 13 | 12 | 36 | 263 | 51 | 10 | 29 | 302 | 0 | 9 | 29 | 328 | 57 | 10 | 23 | 346 | 24 | 12 | 27 | 359 | 34 | 14 | 55 | 29 |
| 30 | 222 | 40 | 12 | 32 | 265 | 14 | 10 | 26 | 303 | 8 | 9 | 29 | 329 | 40 | 10 | 26 | 346 | 53 | 12 | 32 | 360 | 0 | 15 | 0 | 30 |

## De radiis

| Motus |  | Dies |  | S | G | m | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|
| ~~Motus~~ Solis | dierum | 1 |  | 0 | 0 | 59 | 8 | 19 | 44 |
|  |  | 2 |  | 0 | 1 | 58 | 16 | 27 | 51 |
|  |  | 3 |  | 0 | 2 | 57 | 24 | 41 | 40 |
|  |  | 4 |  | 0 | 3 | 50 | 32 | 55 | 29 |
|  |  | 5 |  | 0 | 4 | 55 | 41 | 9 | 37 |
|  |  | 6 |  | 0 | 5 | 56 | 49 | 23 | 32 |
|  |  | 28 |  | 0 | 27 | 35 | 50 | 29 | 49 |
|  |  | 30 |  | 0 | 29 | 34 | 6 | 57 | 37 |
|  |  | 31 |  | 1 | 0 | 33 | 15 | 11 | 35 |
| Centri lune | dierum | 1 |  | 0 | 24 | 22 | 43 | 23 | 16 |
|  |  | 14 |  | 0 | 5 | 43 | 20 | 48 | 50 |
|  |  | 28 |  | 10 | 22 | 40 | 49 | 51 | 20 |
|  |  | 29 |  | 11 | 17 | 3 | 48 | 34 | 30 |
|  |  | 30 |  | 0 | 11 | 26 | 41 | 37 | 42 |
|  |  | 31 |  | 1 | 5 | 49 | 35 | 1 | 6 |
| Centri Saturni | dierum | 1 |  | 0 | 0 | 2 | 0 | 29 | 30 |
|  |  | 8 |  | 0 | 0 | 16 | 3 | 55 | 37 |
|  |  | 10 |  | 0 | 0 | 20 | 4 | 55 | 47 |
|  |  | 11 |  | 0 | 0 | 22 | 5 | 24 | 27 |
|  |  | 28 |  | 0 | 0 | 56 | 13 | 25 | 51 |
|  |  | 30 |  | 0 | 1 | 0 | 14 | 44 | 51 |
|  |  | 31 |  | 0 | 1 | 2 | 15 | 58 | 21 |
| Argumenti Saturni | dierum | 1 |  | 0 | 0 | 57 | 7 | 44 | 20 |
|  |  | 8 |  | 0 | 7 | 31 | 1 | 48 | 37 |
|  |  | 10 |  | 0 | 9 | 31 | 14 | 27 | 17 |
|  |  | 11 |  | 0 | 10 | 26 | 25 | 7 | 36 |
|  |  | 28 |  | 0 | 20 | 39 | 30 | 41 | 11 |
|  |  | 30 |  | 0 | 28 | 31 | 52 | 9 | 49 |
|  |  | 31 |  | 0 | 29 | 30 | 59 | 44 | 9 |
| Motus augium unius diei |  |  |  | 0 | 0 | 0 | 0 | 5 | 42 |
| Motus augium quinque dierum |  |  |  | 0 | 0 | 0 | 0 | 26 | 30 |
| Motus augium 30 dierum |  |  |  | 0 | 0 | 0 | 2 | 51 | 0 |
| Centri [illegible] 8 dierum |  |  |  | 0 | 4 | 11 | 32 | 38 | 24 |
| Centri [illegible] 8 dierum |  |  |  | 0 | 7 | 43 | 5 | 41 | 22 |

| dies | S | G | m | 2 | 3 |
|---|---|---|---|---|---|
| 4 | 0 | 3 | 21 | 58 | 22 |
| 6 | 0 | 4 | 42 | 26 | 26 |
| 9 | 0 | 8 | 32 | 9 | 39 |

| Motus |  | Dies |  | S | G | m | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|
| Centri Jovis | dierum | 1 |  | 0 | 0 | 4 | 59 | 9 | 39 |
|  |  | 4 |  | 0 | 0 | 19 | 56 | 38 | 36 |
|  |  | 6 |  | 0 | 0 | 29 | 54 | 51 | 54 |
|  |  | 7 |  | 0 | 0 | 34 | 54 | 7 | 34 |
|  |  | 8 |  | 0 | 0 | 39 | 53 | 17 | 12 |
|  |  | 28 |  | 0 | 2 | 19 | 30 | 30 | 16 |
|  |  | 30 |  | 0 | 2 | 29 | 34 | 49 | 32 |
|  |  | 31 |  | 0 | 2 | 34 | 33 | 49 | 13 |
| Argumenti Jovis | dierum | 1 |  | 0 | 0 | 54 | 9 | 4 | 10 |
|  |  | 4 |  | 0 | 3 | 36 | 36 | 16 | 41 |
|  |  | 6 |  | 0 | 4 | 34 | 54 | 24 | 1 |
|  |  | 7 |  | 0 | 6 | 19 | 3 | 29 | 11 |
|  |  | 28 |  | 0 | 24 | 19 | 13 | 38 | 46 |
|  |  | 31 |  | 0 | 27 | [illegible] | [illegible] | 9 | 26 |
|  |  | 30 |  | 0 | 27 | 4 | 52 | 5 | 16 |
|  |  | 8 |  | 0 | 7 | ~~13~~ | ~~16~~ | ~~53~~ | ~~51~~ |
| Centri Martis | dierum | 1 |  | 0 | 0 | 31 | 26 | 32 | 58 |
|  |  | 4 |  | 0 | 2 | 5 | 46 | 11 | 52 |
|  |  | 6 |  | 0 | 3 | 8 | 39 | 17 | 48 |
|  |  | 7 |  | 0 | 3 | 40 | 5 | 50 | 46 |
|  |  | 28 |  | 0 | 14 | 40 | 23 | 23 | 4 |
|  |  | 30 |  | 0 | 15 | 43 | 16 | 29 | 0 |
|  |  | 31 |  | 0 | 16 | 46 | 43 | 1 | 48 |
| Argumenti Martis | dierum | 1 |  | 0 | 0 | 27 | 41 | 40 | 37 |
|  |  | 4 |  | 0 | 1 | 50 | 46 | 43 | 49 |
|  |  | 6 |  | 0 | 2 | 46 | 10 | 5 | 44 |
|  |  | 7 |  | 0 | 3 | 13 | 51 | 40 | 41 |
|  |  | 28 |  | 0 | 12 | 54 | 27 | 6 | 43 |
|  |  | 30 |  | 0 | 13 | 50 | 50 | 28 | 37 |
|  |  | 31 |  | 0 | 14 | 18 | 30 | 9 | 34 |

Arcus [illegible] 0 0 55 39 21
Arcus [illegible] 1 diei 3 6 29 8

| dies | S | G | m | 2 | 3 | 4 |
|---|---|---|---|---|---|---|
| Centri Jovis |  |  |  |  |  |  |
| 4 | 0 | 0 | 24 | 44 | 40 | 14 |
| 9 | 0 | 0 | 44 | 42 | 20 |  |
| 10 | 0 | 0 | 49 | 41 | 36 | 3 |
| Argumenti Jovis |  |  |  |  |  |  |
| 4 | 0 | 4 | 30 | 41 | 20 | 41 |
| 9 | 0 | 8 | 7 | 21 | 37 |  |
| 10 | 0 | 9 | 1 | 30 | 41 | 42 |
| Centri Martis |  |  |  |  |  |  |
| 4 | 0 | 2 | 27 | 12 | 44 | 41 |
| 9 | 0 | 4 | 22 | 48 | 47 |  |
| 10 | 0 | 4 | 59 | 54 | 29 |  |
| Argumenti Martis |  |  |  |  |  |  |
| 4 | 0 | 5 | 18 | 58 | 34 | 46 |
| 9 | 0 | 4 | 9 | 14 | 9 |  |
| 10 | 0 | 4 | 36 | 46 | 29 | 3 |

## Aries ♈ — Thauro ♉

| S | Hore meri diei h | m | Hore hora logy h | m | Ascen (7) | 8 (2) | 9 (3) | 10 (4) | 11 (5) | 12 (6) | S | h | m | h | m | Ascen (7) | 8 (2) | 9 (3) | 10 (4) | 11 (5) | 12 (6) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | longi ♈ | ♉ | ♊ | ♋ | ♌ | ♍ | | | | | | longi ♌ | ♍ | ♎ | ♏ | ♐ | ♑ |
| 1 | 6 | 4 | 12 | 5 | 1 | 4 | 4 | 1 | 29 | 29 | 1 | 7 | 54 | 14 | 55 | 1 | 5 | 8 | 11 | 7 | 4 |
| 2 | 6 | 7 | 12 | 11 | 2 | 5 | 4 | 2 | 30 | 30 | 2 | 7 | 58 | 14 | 59 | 2 | 6 | 9 | 12 | 8 | 5 |
| 3 | 6 | 11 | 12 | 17 | 3 | 6 | 5 | 4 | 1 | 1 | 3 | 8 | 3 | 15 | 5 | 3 | 7 | 10 | 14 | 10 | 6 |
| 4 | 6 | 14 | 12 | 22 | 4 | 7 | 6 | 5 | 2 | 2 | 4 | 8 | 7 | 15 | 10 | 4 | 9 | 11 | 15 | 11 | 8 |
| 5 | 6 | 18 | 12 | 28 | 5 | 8 | 8 | 7 | 4 | 4 | 5 | 8 | 11 | 15 | 16 | 5 | 10 | 13 | 17 | 13 | 9 |
| 6 | 6 | 22 | 12 | 34 | 6 | 9 | 9 | 8 | 5 | 5 | 6 | 8 | 15 | 15 | 21 | 6 | 11 | 13 | 18 | 13 | 10 |
| 7 | 6 | 26 | 12 | 39 | 7 | 10 | 10 | 9 | 6 | 6 | 7 | 8 | 19 | 15 | 27 | 7 | 12 | 15 | 10 | 17 | 11 |
| 8 | 6 | 30 | 12 | 45 | 8 | 11 | 11 | 11 | 7 | 7 | 8 | 8 | 22 | 15 | 29 | 8 | 13 | 15 | 20 | 15 | 11 |
| 9 | 6 | 33 | 12 | 50 | 9 | 12 | 13 | 11 | 8 | 8 | 9 | 8 | 26 | 15 | 38 | 9 | 14 | 17 | 22 | 17 | 14 |
| 10 | 6 | 36 | 12 | 56 | 10 | 13 | 14 | 13 | 10 | 10 | 10 | 8 | 30 | 15 | 44 | 10 | 16 | 19 | 24 | 20 | 16 |
| 11 | 6 | 41 | 13 | 2 | 11 | 14 | 15 | 14 | 11 | 10 | 11 | 8 | 34 | 15 | 49 | 11 | 16 | 20 | 25 | 21 | 16 |
| 12 | 6 | 44 | 13 | 7 | 12 | 15 | 16 | 15 | 12 | 11 | 12 | 8 | 38 | 15 | 55 | 12 | 17 | 21 | 26 | 22 | 17 |
| 13 | 6 | 48 | 13 | 13 | 13 | 17 | 18 | 17 | 14 | 13 | 13 | 8 | 42 | 16 | 0 | 13 | 18 | 22 | 28 | 23 | 18 |
| 14 | 6 | 52 | 13 | 18 | 14 | 16 | 16 | 19 | 15 | 14 | 14 | 8 | 46 | 16 | 6 | 14 | 19 | 23 | 29 | 24 | 20 |
| 15 | 6 | 55 | 13 | 23 | 15 | 19 | 19 | 20 | 17 | 15 | 15 | 8 | 50 | 16 | 11 | 15 | 20 | 24 | 30 | 26 | 21 |
| 16 | 6 | 59 | 13 | 30 | 16 | 19 | 20 | 21 | 17 | 15 | 16 | 8 | 54 | 16 | 17 | 16 | 21 | 25 | 2 | 27 | 22 |
| 17 | 7 | 3 | 13 | 34 | 17 | 20 | 24 | 22 | 18 | 16 | 17 | 8 | 58 | 16 | 23 | 17 | 22 | 26 | 4 | 28 | 23 |
| 18 | 7 | 7 | 13 | 41 | 18 | 22 | 23 | 24 | 20 | 19 | 18 | 9 | 2 | 16 | 28 | 18 | 24 | 28 | 6 | 30 | 24 |
| 19 | 7 | 10 | 13 | 46 | 19 | 23 | 24 | 24 | 21 | 20 | 19 | 9 | 6 | 16 | 34 | 19 | 25 | 29 | 7 | 2 | 25 |
| 20 | 7 | 14 | 13 | 52 | 20 | 24 | 26 | 26 | 23 | 22 | 20 | 9 | 10 | 16 | 39 | 20 | 25 | 30 | 8 | 3 | 26 |
| 21 | 7 | 18 | 13 | 57 | 21 | 25 | 26 | 27 | 23 | 22 | 21 | 9 | 14 | 16 | 45 | 21 | 27 | 1 | 10 | 4 | 27 |
| 22 | 7 | 21 | 14 | 3 | 22 | 26 | 26 | 28 | 24 | 23 | 22 | 9 | 18 | 16 | 50 | 22 | 28 | 2 | 11 | 5 | 28 |
| 23 | 7 | 25 | 14 | 9 | 23 | 28 | 29 | 30 | 26 | 24 | 23 | 9 | 22 | 16 | 56 | 23 | 29 | 4 | 12 | 7 | 1 |
| 24 | 7 | 29 | 14 | 14 | 24 | 28 | 29 | 1 | 27 | 24 | 24 | 9 | 26 | 17 | 1 | 24 | 25 | 5 | 14 | 8 | 2 |
| 25 | 7 | 33 | 14 | 16 | 25 | 30 | 30 | 2 | 28 | 27 | 25 | 9 | 31 | 17 | 7 | 25 | 30 | 6 | 15 | 9 | 3 |
| 26 | 7 | 36 | 14 | 25 | 26 | 1 | 2 | 4 | 30 | 28 | 26 | 9 | 35 | 17 | 12 | 26 | 30 | 6 | 16 | 9 | 3 |
| 27 | 7 | 40 | 14 | 31 | 27 | 2 | 3 | 5 | 1 | 29 | 27 | 9 | 39 | 17 | 18 | 27 | 1 | 9 | 19 | 12 | 5 |
| 28 | 7 | 44 | 14 | 37 | 28 | 3 | 4 | 7 | 4 | 30 | 28 | 9 | 43 | 17 | 23 | 28 | 4 | 10 | 20 | 14 | 7 |
| 29 | 7 | 48 | 14 | 42 | 29 | 4 | 6 | 8 | 5 | 2 | 29 | 9 | 47 | 17 | 29 | 29 | 5 | 11 | 22 | 15 | 8 |
| 30 | 7 | 52 | 14 | 48 | 30 | 4 | 7 | 10 | 6 | 3 | 30 | 9 | 51 | 17 | 34 | 30 | 6 | 12 | 23 | 16 | 9 |

## Gemini ♊ — Cancer ♋

| S | Hore meri diei h | m | Hore hora logy h | m | Ascen (7) | 8 (2) | 9 (3) | 10 (4) | 11 (5) | 12 (6) | S | h | m | h | m | Ascen (7) | 8 (2) | 9 (3) | 10 (4) | 11 (5) | 12 (6) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ♌ | ♍ | ♎ | ♏ | ♐ | ♑ | | | | | | ♍ | ♎ | ♏ | ♐ | ♑ | ♒ | |
| 1 | 0 | 44 | 11 | 40 | 1 | 7 | 14 | 24 | 18 | 10 | 1 | 12 | 4 | 20 | 9 | 1 | 9 | 21 | 5 | 28 | 13 | |
| 2 | 0 | 47 | 11 | 46 | 2 | 8 | 15 | 26 | 19 | 11 | 2 | 12 | 9 | 20 | 14 | 2 | 10 | 23 | 6 | 26 | 14 | |
| 3 | 0 | 49 | 11 | 51 | 3 | 9 | 16 | 21 | 20 | 12 | 3 | 12 | 13 | 20 | 18 | 3 | 11 | 24 | 7 | 27 | 15 | |
| 4 | 10 | 4 | 11 | 56 | 4 | 10 | 18 | 29 | 21 | 13 | 4 | 12 | 17 | 20 | 22 | 4 | 12 | 24 | 8 | 28 | 16 | |
| 5 | 10 | 8 | 18 | 1 | 5 | 11 | 19 | 30 | 23 | 14 | 5 | 12 | 22 | 20 | 26 | 5 | 13 | 26 | 9 | 29 | 17 | |
| 6 | 10 | 14 | 18 | 7 | 6 | 12 | 20 | 2 | 24 | 16 | 6 | 12 | 26 | 20 | 30 | 6 | 14 | 27 | 10 | 30 | 18 | |
| 7 | 10 | 20 | 18 | 12 | 7 | 12 | 21 | 4 | 25 | 16 | 7 | 12 | 31 | 20 | 34 | 7 | 14 | 28 | 11 | 1 | 18 | |
| 8 | 10 | 25 | 18 | 18 | 8 | 14 | 22 | 5 | 26 | 18 | 8 | 12 | 34 | 20 | 38 | 8 | 17 | 29 | 12 | 2 | 20 | |
| 9 | 10 | 29 | 18 | 23 | 9 | 15 | 24 | 6 | 29 | 19 | 9 | 12 | 39 | 20 | 42 | 9 | 18 | 30 | 13 | 3 | 21 | |
| 10 | 10 | 34 | 18 | 29 | 10 | 16 | 24 | 8 | 30 | 20 | 10 | 12 | 44 | 20 | 46 | 10 | 19 | 1 | 14 | 4 | 22 | |
| 11 | 10 | 38 | 18 | 36 | 11 | 18 | 26 | 9 | 1 | 22 | 11 | 12 | 48 | 20 | 40 | 11 | 20 | 3 | 14 | 4 | 27 | 4 |
| 12 | 10 | 44 | 18 | 39 | 12 | 19 | 28 | 10 | 3 | 23 | 12 | 12 | 52 | 20 | 45 | 12 | 21 | 4 | 15 | 5 | 26 | 5 |
| 13 | 10 | 47 | 18 | 44 | 13 | 19 | 28 | 11 | 3 | 23 | 13 | 12 | 55 | 20 | 48 | 13 | 22 | 5 | 17 | 6 | 24 | 6 |
| 14 | 10 | 50 | 18 | 49 | 14 | 21 | 30 | 14 | 5 | 24 | 14 | 13 | 1 | 21 | 2 | 14 | 23 | 6 | 15 | 7 | 26 | 7 |
| 15 | 10 | 55 | 18 | 54 | 15 | 22 | 1 | 15 | 6 | 26 | 15 | 13 | 5 | 21 | 6 | 15 | 24 | 7 | 19 | 18 | 21 | 8 |
| 16 | 10 | 59 | 18 | 59 | 16 | 23 | 2 | 16 | 7 | 27 | 16 | 13 | 10 | 21 | 9 | 16 | 24 | 18 | 20 | 19 | 28 | 9 |
| 17 | 11 | 4 | 19 | 4 | 17 | 24 | 4 | 18 | 8 | 28 | 17 | 13 | 14 | 21 | 13 | 17 | 26 | 19 | 21 | 10 | 29 | 10 |
| 18 | 11 | 8 | 19 | 9 | 18 | 24 | 6 | 19 | 10 | 30 | 18 | 13 | 18 | 21 | 16 | 18 | 21 | 10 | 24 | 11 | 29 | 11 |
| 19 | 11 | 12 | 19 | 14 | 19 | 26 | 7 | 20 | 11 | 1 | 19 | 13 | 22 | 21 | 19 | 19 | 26 | 11 | 22 | 12 | 30 | 12 |
| 20 | 11 | 16 | 19 | 18 | 20 | 27 | 8 | 21 | 12 | 2 | 20 | 13 | 24 | 21 | 22 | 20 | 29 | 12 | 23 | 12 | 1 | 12 |
| 21 | 11 | 20 | 19 | 23 | 21 | 28 | 9 | 22 | 13 | 3 | 21 | 13 | 26 | 21 | 24 | 21 | 30 | 13 | 24 | 13 | 2 | 17 |
| 22 | 11 | 24 | 19 | 28 | 22 | 29 | 10 | 23 | 14 | 4 | 22 | 13 | 34 | 21 | 26 | 22 | 1 | 14 | 24 | 14 | 3 | 14 |
| 23 | 11 | 30 | 19 | 33 | 23 | 30 | 11 | 25 | 15 | 4 | 23 | 13 | 39 | 21 | 31 | 23 | 1 | 14 | 26 | 15 | 3 | 15 |
| 24 | 11 | 34 | 19 | 37 | 24 | 1 | 13 | 26 | 17 | 5 | 24 | 13 | 44 | 21 | 34 | 24 | 3 | 16 | 21 | 16 | 4 | 16 |
| 25 | 11 | 38 | 19 | 42 | 25 | 2 | 14 | 28 | 18 | 6 | 25 | 13 | 48 | 21 | 37 | 25 | 4 | 16 | 21 | 16 | 5 | 16 |
| 26 | 11 | 43 | 19 | 47 | 26 | 3 | 15 | 29 | 19 | 7 | 26 | 13 | 52 | 21 | 40 | 26 | 5 | 17 | 28 | 17 | 6 | 17 |
| 27 | 11 | 47 | 19 | 51 | 27 | 5 | 16 | 30 | 20 | 9 | 27 | 13 | 57 | 21 | 43 | 27 | 6 | 18 | 29 | 18 | 7 | 18 |
| 28 | 11 | 52 | 19 | 56 | 28 | 6 | 17 | 2 | 21 | 10 | 28 | 14 | 1 | 21 | 46 | 28 | 7 | 19 | 29 | 18 | 8 | 18 |
| 29 | 11 | 50 | 20 | 1 | 29 | 7 | 18 | 3 | 22 | 11 | 29 | 14 | 5 | 21 | 40 | 29 | 8 | 19 | 29 | 19 | 9 | 19 |
| 30 | 12 | 0 | 20 | 5 | 30 | 8 | 19 | 4 | 23 | 12 | 30 | 14 | 9 | 21 | 42 | 30 | 10 | 24 | 30 | 19 | 11 | 19 |

## Leo ♌

| | hore meri diei | | hore hora longit | | ascen | 8 / 2 | 9 / 3 | 10 / 4 | 11 / 5 | 12 / 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | ♓ | ♈ | ♊ | ♊ | ♋ |
| G | h | m | h | m | G | G | G | G | G | G |
| 1 | 14 | 13 | 21 | 55 | 1 | 10 | 22 | 1 | 21 | 11 |
| 2 | 14 | 17 | 21 | 58 | 2 | 11 | 23 | 2 | 22 | 11 |
| 3 | 14 | 21 | 22 | 1 | 3 | 12 | 23 | 3 | 22 | 12 |
| 4 | 14 | 25 | 22 | 4 | 4 | 13 | 24 | 3 | 23 | 13 |
| 5 | 14 | 29 | 22 | 6 | 5 | 14 | 25 | 4 | 24 | 14 |
| 6 | 14 | 33 | 22 | 9 | 6 | 15 | 26 | 4 | 25 | 15 |
| 7 | 14 | 37 | 22 | 12 | 7 | 16 | 27 | 4 | 26 | 16 |
| 8 | 14 | 42 | 22 | 14 | 8 | 17 | 28 | 5 | 26 | 17 |
| 9 | 14 | 46 | 22 | 17 | 9 | 19 | 29 | 6 | 27 | 18 |
| 10 | 14 | 50 | 22 | 19 | 10 | 19 | 29 | 6 | 28 | 18 |
| 11 | 14 | 54 | 22 | 22 | 11 | 20 | 30 | 7 | 28 | 19 |
| 12 | 14 | 58 | 22 | 24 | 12 | 21 | ♉ 1 | 8 | 29 | 20 |
| 13 | 15 | 2 | 22 | 26 | 13 | 22 | 2 | 9 | 29 | 21 |
| 14 | 15 | 6 | 22 | 29 | 14 | 23 | 3 | 9 | 30 | 22 |
| 15 | 15 | 10 | 22 | 31 | 15 | 24 | 4 | 9 | ♋ 1 | 23 |
| 16 | 15 | 14 | 22 | 34 | 16 | 24 | 4 | 10 | 1 | 24 |
| 17 | 15 | 18 | 22 | 36 | 17 | 25 | 5 | 11 | 2 | 24 |
| 18 | 15 | 22 | 22 | 38 | 18 | 26 | 6 | 11 | 3 | 25 |
| 19 | 15 | 26 | 22 | 41 | 19 | 27 | 6 | 12 | 3 | 25 |
| 20 | 15 | 30 | 22 | 43 | 20 | 28 | 7 | 12 | 4 | 26 |
| 21 | 15 | 34 | 22 | 46 | 21 | 29 | 8 | 13 | 5 | 27 |
| 22 | 15 | 38 | 22 | 48 | 22 | 30 | 9 | 13 | 6 | 28 |
| 23 | 15 | 42 | 22 | 50 | 23 | ♈ | 10 | 14 | 6 | 29 |
| 24 | 15 | 45 | 22 | 52 | 24 | 3 | 10 | 15 | 7 | 29 |
| 25 | 15 | 49 | 22 | 54 | 25 | 3 | 11 | 15 | 8 | 30 |
| 26 | 15 | 53 | 22 | 57 | 26 | 4 | 11 | 16 | 8 | ♌ 1 |
| 27 | 15 | 57 | 22 | 59 | 27 | 5 | 12 | 16 | 9 | 2 |
| 28 | 16 | 1 | 23 | 1 | 28 | 6 | 13 | 17 | 10 | 3 |
| 29 | 16 | 5 | 23 | 3 | 29 | 7 | 13 | 17 | 10 | 4 |
| 30 | 16 | 9 | 23 | 5 | 30 | 7 | 14 | 18 | 11 | 4 |

## Virgo ♍

| | hore meri diei | | horae hora longit | | ascen | 8 / 2 | 9 / 3 | 10 / 4 | 11 / 5 | 12 / 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ♓ | ♈ | ♉ | ♊ | ♋ | ♌ |
| G | h | m | h | m | G | G | G | G | G | G |
| 1 | 16 | 12 | 23 | 7 | 1 | 8 | 14 | 18 | 11 | 5 |
| 2 | 16 | 16 | 23 | 9 | 2 | 9 | 14 | 18 | 11 | 6 |
| 3 | 16 | 20 | 23 | 11 | 3 | 10 | 16 | 18 | 12 | 7 |
| 4 | 16 | 24 | 23 | 13 | 4 | 10 | 17 | 19 | 13 | 7 |
| 5 | 16 | 28 | 23 | 14 | 5 | 11 | 17 | 19 | 13 | 8 |
| 6 | 16 | 31 | 23 | 16 | 6 | 12 | 18 | 20 | 14 | 9 |
| 7 | 16 | 35 | 23 | 18 | 7 | 14 | 18 | 20 | 14 | 10 |
| 8 | 16 | 39 | 23 | 20 | 8 | 15 | 19 | 21 | 15 | 11 |
| 9 | 16 | 43 | 23 | 22 | 9 | 15 | 20 | 21 | 15 | 11 |
| 10 | 16 | 46 | 23 | 24 | 10 | 16 | 20 | 22 | 16 | 12 |
| 11 | 16 | 50 | 23 | 26 | 11 | 17 | 21 | 22 | 17 | 13 |
| 12 | 16 | 54 | 23 | 28 | 12 | 18 | 22 | 22 | 18 | 14 |
| 13 | 16 | 58 | 23 | 30 | 13 | 18 | 22 | 23 | 18 | 14 |
| 14 | 17 | 1 | 23 | 31 | 14 | 19 | 23 | 23 | 19 | 15 |
| 15 | 17 | 5 | 23 | 33 | 15 | 20 | 23 | 24 | 19 | 16 |
| 16 | 17 | 9 | 23 | 34 | 16 | 21 | 24 | 24 | 20 | 17 |
| 17 | 17 | 12 | 23 | 37 | 17 | 22 | 25 | 25 | 21 | 18 |
| 18 | 17 | 16 | 23 | 39 | 18 | 22 | 25 | 25 | 21 | 18 |
| 19 | 17 | 20 | 23 | 41 | 19 | 23 | 26 | 26 | 22 | 19 |
| 20 | 17 | 24 | 23 | 42 | 20 | 24 | 26 | 26 | 22 | 20 |
| 21 | 17 | 27 | 23 | 44 | 21 | 25 | 27 | 27 | 23 | 21 |
| 22 | 17 | 31 | 23 | 46 | 22 | 26 | 28 | 27 | 24 | 22 |
| 23 | 17 | 35 | 23 | 48 | 23 | 26 | 28 | 27 | 24 | 22 |
| 24 | 17 | 38 | 23 | 50 | 24 | 27 | 29 | 28 | 25 | 23 |
| 25 | 17 | 42 | 23 | 51 | 25 | 29 | 30 | 28 | 25 | 24 |
| 26 | 17 | 45 | 23 | 53 | 26 | 29 | 30 | 29 | 25 | 24 |
| 27 | 17 | 49 | 23 | 55 | 27 | 30 | ♊ | 29 | 26 | 26 |
| 28 | 17 | 53 | 23 | 57 | 28 | ♉ 1 | 1 | 29 | 26 | 26 |
| 29 | 17 | 56 | 23 | 58 | 29 | 2 | 2 | 29 | 27 | 27 |
| 30 | 18 | 0 | 0 | 0 | 30 | 3 | 3 | 30 | 28 | 28 |

## Libra ♎

| | hore meri diei | | hore hora longit | | ascen | 8 / 2 | 9 / 3 | 10 / 4 | 11 / 5 | 12 / 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ♑ | ♉ | ♊ | ♋ | ♋ | ♌ |
| G | h | m | h | m | G | G | G | G | G | G |
| 1 | 18 | 4 | 0 | 2 | 1 | 3 | 3 | 1 | 29 | 28 |
| 2 | 18 | 7 | 0 | 3 | 2 | 4 | 4 | 1 | 29 | 29 |
| 3 | 18 | 11 | 0 | 5 | 3 | 5 | 4 | 1 | 29 | 30 |
| 4 | 18 | 14 | 0 | 7 | 4 | 5 | 4 | 1 | 29 | 30 |
| 5 | 18 | 18 | 0 | 9 | 5 | 6 | 4 | 2 | 30 | ♍ 1 |
| 6 | 18 | 22 | 0 | 10 | 6 | 7 | 5 | 2 | ♌ 1 | 3 |
| 7 | 18 | 26 | 0 | 12 | 7 | 8 | 6 | 3 | 2 | 4 |
| 8 | 18 | 29 | 0 | 14 | 8 | 9 | 6 | 3 | 2 | 5 |
| 9 | 18 | 33 | 0 | 16 | 9 | 9 | 7 | 3 | 3 | 5 |
| 10 | 18 | 37 | 0 | 18 | 10 | 10 | 8 | 4 | 4 | 6 |
| 11 | 18 | 40 | 0 | 20 | 11 | 11 | 8 | 4 | 4 | 7 |
| 12 | 18 | 44 | 0 | 21 | 12 | 12 | 8 | 5 | 4 | 7 |
| 13 | 18 | 48 | 0 | 23 | 13 | 12 | 9 | 5 | 5 | 8 |
| 14 | 18 | 52 | 0 | 25 | 14 | 13 | 10 | 6 | 6 | 9 |
| 15 | 18 | 55 | 0 | 27 | 15 | 14 | 11 | 6 | 7 | 10 |
| 16 | 18 | 59 | 0 | 29 | 16 | 14 | 11 | 7 | 7 | 10 |
| 17 | 19 | 2 | 0 | 30 | 17 | 16 | 12 | 7 | 8 | 12 |
| 18 | 19 | 6 | 0 | 32 | 18 | 16 | 12 | 8 | 8 | 12 |
| 19 | 19 | 10 | 0 | 34 | 19 | 17 | 13 | 8 | 9 | 13 |
| 20 | 19 | 14 | 0 | 36 | 20 | 18 | 14 | 9 | 10 | 14 |
| 21 | 19 | 17 | 0 | 38 | 21 | 19 | 14 | 9 | 10 | 15 |
| 22 | 19 | 21 | 0 | 40 | 22 | 19 | 15 | 9 | 11 | 15 |
| 23 | 19 | 25 | 0 | 42 | 23 | 20 | 16 | 10 | 12 | 16 |
| 24 | 19 | 29 | 0 | 44 | 24 | 21 | 16 | 10 | 12 | 17 |
| 25 | 19 | 33 | 0 | 46 | 25 | 22 | 17 | 11 | 13 | [illegible] |
| 26 | 19 | 36 | 0 | 47 | 26 | 23 | 17 | 11 | 13 | 20 |
| 27 | 19 | 40 | 0 | 49 | 27 | 23 | 18 | 11 | 14 | 20 |
| 28 | 19 | 44 | 0 | 51 | 28 | 24 | 18 | 11 | 15 | 21 |
| 29 | 19 | 48 | 0 | 53 | 29 | 25 | 18 | 12 | 15 | 22 |
| 30 | 19 | 51 | 0 | 55 | 30 | 26 | 19 | 12 | 16 | 23 |

## Scorpio ♏

| | hore meri diei | | hore hora longit | | ascen | 8 / 2 | 9 / 3 | 10 / 4 | 11 / 5 | 12 / 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | ♏ | ♏ | ♌ | ♌ | ♍ |
| G | h | m | h | m | G | G | G | G | G | G |
| 1 | 19 | 55 | 0 | 57 | 1 | 27 | 20 | 13 | 17 | 24 |
| 2 | 19 | 59 | 0 | 59 | 2 | 27 | 20 | 13 | 17 | 24 |
| 3 | 20 | 3 | 1 | 1 | 3 | 28 | 21 | 14 | 18 | 25 |
| 4 | 20 | 7 | 1 | 3 | 4 | 29 | 22 | 14 | 19 | 26 |
| 5 | 20 | 11 | 1 | 5 | 5 | 30 | 23 | 15 | 19 | 27 |
| 6 | 20 | 15 | 1 | 7 | 6 | ♐ 1 | 23 | 15 | 20 | 28 |
| 7 | 20 | 19 | 1 | 10 | 7 | 1 | 24 | 16 | 21 | 28 |
| 8 | 20 | 23 | 1 | 12 | 8 | 2 | 24 | 17 | 21 | 29 |
| 9 | 20 | 26 | 1 | 14 | 9 | 3 | 25 | 17 | 22 | 30 |
| 10 | 20 | 30 | 1 | 17 | 10 | 4 | 26 | 18 | 23 | ♎ |
| 11 | 20 | 34 | 1 | 19 | 11 | 4 | 27 | 18 | 24 | 3 |
| 12 | 20 | 38 | 1 | 22 | 12 | 5 | 27 | 19 | 24 | 4 |
| 13 | 20 | 42 | 1 | 24 | 13 | 6 | 28 | 19 | 25 | 5 |
| 14 | 20 | 46 | 1 | 26 | 14 | 6 | 29 | 20 | 26 | 5 |
| 15 | 20 | 50 | 1 | 29 | 15 | 7 | 29 | 21 | 26 | 6 |
| 16 | 20 | 54 | 1 | 32 | 16 | 8 | 29 | 21 | 27 | 7 |
| 17 | 20 | 58 | 1 | 33 | 17 | 9 | 30 | 22 | 28 | 8 |
| 18 | 21 | 2 | 1 | 36 | 18 | 9 | ♐ 1 | 22 | 29 | 9 |
| 19 | 21 | 6 | 1 | 38 | 19 | 10 | 1 | 23 | 29 | 10 |
| 20 | 21 | 10 | 1 | 41 | 20 | 11 | 2 | 24 | 30 | 10 |
| 21 | 21 | 14 | 1 | 43 | 21 | 12 | 3 | 24 | ♍ 1 | 11 |
| 22 | 21 | 18 | 1 | 46 | 22 | 13 | 4 | 24 | 2 | 13 |
| 23 | 21 | 22 | 1 | 49 | 23 | 14 | 4 | 24 | 3 | 14 |
| 24 | 21 | 27 | 1 | 51 | 24 | 15 | 5 | 25 | 4 | 15 |
| 25 | 21 | 31 | 1 | 54 | 25 | 16 | 6 | 26 | 5 | 16 |
| 26 | 21 | 35 | 1 | 57 | 26 | 17 | 7 | 27 | 6 | 17 |
| 27 | 21 | 39 | 1 | 59 | 27 | 18 | 8 | 27 | 7 | 18 |
| 28 | 21 | 43 | 2 | 2 | 28 | 18 | 8 | 28 | 7 | 19 |
| 29 | 21 | 47 | 2 | 5 | 29 | 19 | 9 | 29 | 8 | 20 |
| 30 | 21 | 51 | 2 | 8 | 30 | 20 | 11 | 30 | 10 | 21 |

## Sagittarius ♐

| Dies | Hore meridiei dierum h | m | Hore hora logy h | m | Ascen. | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2 | 3 | 4 | 5 | 6 |
| g | h | m | h | m | g | g | g | g | g | g |
| 1 | 21 | 55 | 2 | 11 | 1 | 20 | 11 | 30 | 10 | 22 |
| 2 | 21 | 59 | 2 | 14 | 2 | 22 | 12 | sign 1 | 11 | 23 |
| 3 | 22 | 4 | 2 | 17 | 3 | 23 | 14 | 2 | 12 | 24 |
| 4 | 22 | 8 | 2 | 20 | 4 | 24 | 13 | 2 | 12 | 25 |
| 5 | 22 | 12 | 2 | 23 | 5 | 26 | 13 | 3 | 13 | 25 |
| 6 | 22 | 16 | 2 | 26 | 6 | 25 | 14 | 4 | 14 | 26 |
| 7 | 22 | 21 | 2 | 29 | 7 | 26 | 15 | 5 | 15 | 28 |
| 8 | 22 | 25 | 2 | 32 | 8 | 27 | 16 | 5 | 16 | 29 |
| 9 | 22 | 29 | 2 | 35 | 9 | 28 | 17 | 6 | 18 | 30 |
| 10 | 22 | 34 | 2 | 38 | 10 | 29 | 18 | 7 | 19 | sign 2 |
| 11 | 22 | 38 | 2 | 41 | 11 | 29 | 19 | 8 | 20 | 2 |
| 12 | 22 | 42 | 2 | 44 | 12 | 30 | 19 | 9 | 20 | 3 |
| 13 | 22 | 46 | 2 | 47 | 13 | sign 1 | 20 | 9 | 21 | 4 |
| 14 | 22 | 50 | 2 | 51 | 14 | 2 | 21 | 10 | 22 | 5 |
| 15 | 22 | 55 | 2 | 54 | 15 | 3 | 22 | 11 | 23 | 6 |
| 16 | 22 | 59 | 2 | 58 | 16 | 4 | 23 | 12 | 24 | 7 |
| 17 | 23 | 3 | 3 | 2 | 17 | 4 | 23 | 13 | 24 | 8 |
| 18 | 23 | 8 | 3 | 5 | 18 | 6 | 25 | 14 | 26 | 9 |
| 19 | 23 | 12 | 3 | 9 | 19 | 7 | 25 | 15 | 27 | 10 |
| 20 | 23 | 16 | 3 | 13 | 20 | 8 | 26 | 16 | 28 | 11 |
| 21 | 23 | 20 | 3 | 21 | 21 | 9 | 27 | 17 | 29 | 12 |
| 22 | 23 | 24 | 3 | 26 | 22 | 10 | 28 | 18 | 30 | 13 |
| 23 | 23 | 29 | 3 | 30 | 23 | 11 | 29 | 19 | sign 2 | 14 |
| 24 | 23 | 33 | 3 | 34 | 24 | 12 | 30 | 20 | 3 | 16 |
| 25 | 23 | 37 | 3 | 38 | 25 | 13 | sign 1 | 21 | 4 | 17 |
| 26 | 23 | 41 | 3 | 42 | 26 | 14 | 2 | 22 | 5 | 18 |
| 27 | 23 | 46 | 3 | 46 | 27 | 15 | 3 | 23 | 6 | 19 |
| 28 | 23 | 50 | 3 | 46 | 28 | 16 | 4 | 24 | 7 | 20 |
| 29 | 23 | 55 | 3 | 50 | 29 | 17 | 6 | 25 | 8 | 21 |
| 30 | 24 | 0 | 3 | 55 | 30 | 18 | 7 | 26 | 9 | 22 |

## Capricornus ♑

| Dies | Hore meridiei dierum h | m | Hore hora logy h | m | Ascen. | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2 | 3 | 4 | 5 | 6 |
| g | h | m | h | m | g | g | g | g | g | g |
| 1 | 0 | 3 | 3 | 49 | 1 | 19 | 8 | 27 | 11 | 23 |
| 2 | 0 | 7 | 4 | 4 | 2 | 21 | 9 | 29 | 13 | 24 |
| 3 | 0 | 12 | 4 | 9 | 3 | 22 | 10 | 30 | 14 | 25 |
| 4 | 0 | 16 | 4 | 13 | 4 | 23 | 11 | sign 1 | 14 | 27 |
| 5 | 0 | 21 | 4 | 18 | 5 | 24 | 12 | 3 | 16 | 28 |
| 6 | 0 | 25 | 4 | 23 | 6 | 25 | 14 | 4 | 15 | 29 |
| 7 | 0 | 30 | 4 | 27 | 7 | 26 | 15 | 5 | 19 | 30 |
| 8 | 0 | 34 | 4 | 32 | 8 | 26 | 16 | 7 | 20 | sign 1 |
| 9 | 0 | 38 | 4 | 37 | 9 | 27 | 17 | 8 | 21 | 2 |
| 10 | 0 | 43 | 4 | 42 | 10 | 28 | 18 | 9 | 22 | 3 |
| 11 | 0 | 48 | 4 | 46 | 11 | 29 | 19 | 10 | 23 | 4 |
| 12 | 0 | 52 | 4 | 51 | 12 | 30 | 20 | 11 | 24 | 4 |
| 13 | 0 | 56 | 4 | 56 | 13 | sign 2 | 22 | 12 | 26 | 6 |
| 14 | 1 | 1 | 5 | 1 | 14 | 3 | 23 | 14 | 28 | 7 |
| 15 | 1 | 5 | 5 | 6 | 15 | 4 | 24 | 14 | 29 | 8 |
| 16 | 1 | 9 | 5 | 10 | 16 | 5 | 25 | 16 | 30 | 9 |
| 17 | 1 | 13 | 5 | 14 | 17 | 6 | 26 | 18 | sign 1 | 10 |
| 18 | 1 | 18 | 5 | 21 | 18 | 7 | 27 | 21 | 2 | 11 |
| 19 | 1 | 22 | 5 | 26 | 19 | 8 | 29 | 21 | 4 | 12 |
| 20 | 1 | 26 | 5 | 31 | 20 | 10 | 30 | 22 | 5 | 14 |
| 21 | 1 | 31 | 5 | 37 | 21 | 11 | sign 1 | 24 | 6 | 15 |
| 22 | 1 | 35 | 5 | 42 | 22 | 12 | 2 | 25 | 7 | 16 |
| 23 | 1 | 39 | 5 | 48 | 23 | 13 | 5 | 26 | 9 | 17 |
| 24 | 1 | 43 | 5 | 53 | 24 | 14 | 6 | 28 | 10 | 18 |
| 25 | 1 | 48 | 5 | 58 | 25 | 15 | 7 | 29 | 11 | 19 |
| 26 | 1 | 52 | 6 | 4 | 26 | 17 | 9 | 2 | 13 | 20 |
| 27 | 1 | 56 | 6 | 9 | 27 | 18 | 10 | 3 | 14 | 21 |
| 28 | 2 | 0 | 6 | 14 | 28 | 19 | 11 | 4 | 15 | 22 |
| 29 | 2 | 4 | 6 | 20 | 29 | 20 | 12 | 6 | 16 | 23 |
| 30 | 2 | 9 | 6 | 26 | 30 | 21 | 14 | 7 | 18 | 24 |

## Aquarius ♒

| Dies | Hore meridiei dierum h | m | Hore hora logy h | m | Ascen. | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2 | 3 | 4 | 5 | 6 |
| g | h | m | h | m | g | g | g | g | g | g |
| 1 | 2 | 13 | 6 | 31 | 1 | 22 | 14 | 8 | 19 | 24 |
| 2 | 2 | 17 | 6 | 37 | 2 | 24 | 17 | 10 | 21 | 27 |
| 3 | 2 | 21 | 6 | 42 | 3 | 25 | 18 | 11 | 22 | 28 |
| 4 | 2 | 25 | 6 | 48 | 4 | 26 | 20 | 13 | 23 | 29 |
| 5 | 2 | 29 | 6 | 53 | 5 | 27 | 21 | 14 | 24 | 29 |
| 6 | 2 | 33 | 6 | 58 | 6 | 28 | 22 | 16 | 25 | 30 |
| 7 | 2 | 38 | 7 | 4 | 7 | 29 | 23 | 18 | 26 | sign 1 |
| 8 | 2 | 42 | 7 | 10 | 8 | 30 | 24 | 19 | 28 | 2 |
| 9 | 2 | 46 | 7 | 14 | 9 | sign 2 | 26 | 20 | 29 | 3 |
| 10 | 2 | 50 | 7 | 21 | 10 | 4 | 27 | 22 | 30 | 4 |
| 11 | 2 | 54 | 7 | 26 | 11 | 5 | 28 | 23 | sign 1 | 6 |
| 12 | 2 | 59 | 7 | 32 | 12 | 6 | 30 | 24 | 3 | 7 |
| 13 | 3 | 2 | 7 | 37 | 13 | 7 | sign 2 | 26 | 4 | 8 |
| 14 | 3 | 6 | 7 | 43 | 14 | 8 | 3 | 27 | 4 | 9 |
| 15 | 3 | 10 | 7 | 48 | 15 | 9 | 4 | 30 | 5 | 10 |
| 16 | 3 | 14 | 7 | 54 | 16 | 10 | 6 | sign 1 | 7 | 11 |
| 17 | 3 | 18 | 7 | 59 | 17 | 12 | 8 | 2 | 9 | 12 |
| 18 | 3 | 22 | 8 | 4 | 18 | 13 | 8 | 4 | 9 | 13 |
| 19 | 3 | 26 | 8 | 10 | 19 | 13 | 9 | 5 | 10 | 14 |
| 20 | 3 | 30 | 8 | 16 | 20 | 14 | 11 | 7 | 12 | 15 |
| 21 | 3 | 34 | 8 | 22 | 21 | 16 | 12 | 8 | 13 | 16 |
| 22 | 3 | 38 | 8 | 27 | 22 | 17 | 14 | 9 | 14 | 17 |
| 23 | 3 | 42 | 8 | 33 | 23 | 19 | 15 | 11 | 15 | 18 |
| 24 | 3 | 45 | 8 | 38 | 24 | 20 | 17 | 12 | 17 | 19 |
| 25 | 3 | 49 | 8 | 44 | 25 | 22 | 18 | 14 | 18 | 21 |
| 26 | 3 | 53 | 8 | 50 | 26 | 22 | 19 | 14 | 18 | 21 |
| 27 | 3 | 57 | 8 | 55 | 27 | 24 | 20 | 16 | 19 | 22 |
| 28 | 4 | 1 | 9 | 1 | 28 | 24 | 22 | 18 | 21 | 24 |
| 29 | 4 | 5 | 9 | 6 | 29 | 26 | 23 | 19 | 22 | 24 |
| 30 | 4 | 8 | 9 | 12 | 30 | 28 | 24 | 24 | 22 | 26 |

## Pisces ♓

| Dies | Hore meridiei dierum h | m | Hore hora logy h | m | Ascen. | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2 | 3 | 4 | 5 | 6 |
| g | h | m | h | m | g | g | g | g | g | g |
| 1 | 4 | 12 | 9 | 18 | 1 | 28 | 24 | 22 | 25 | 26 |
| 2 | 4 | 16 | 9 | 23 | 2 | 29 | 27 | 23 | 26 | 27 |
| 3 | 4 | 20 | 9 | 29 | 3 | 30 | 29 | 24 | 27 | 28 |
| 4 | 4 | 24 | 9 | 34 | 4 | sign 2 | 30 | 26 | 26 | 29 |
| 5 | 4 | 27 | 9 | 40 | 5 | 4 | sign 2 | 28 | 29 | sign |
| 6 | 4 | 31 | 9 | 46 | 6 | 5 | 3 | 29 | 30 | 3 |
| 7 | 4 | 34 | 9 | 51 | 7 | 6 | 4 | 30 | 5 | 1 |
| 8 | 4 | 38 | 9 | 57 | 8 | 7 | 5 | sign 2 | 2 | 4 |
| 9 | 4 | 42 | 10 | 2 | 9 | 8 | 6 | 3 | 3 | 5 |
| 10 | 4 | 46 | 10 | 8 | 10 | 9 | 8 | 4 | 5 | 6 |
| 11 | 4 | 50 | 10 | 14 | 11 | 10 | 9 | 5 | 6 | 7 |
| 12 | 4 | 53 | 10 | 19 | 12 | 11 | 10 | 6 | 7 | 8 |
| 13 | 4 | 57 | 10 | 24 | 13 | 13 | 11 | 8 | 8 | 9 |
| 14 | 5 | 1 | 10 | 30 | 14 | 16 | 13 | 9 | 10 | 10 |
| 15 | 5 | 5 | 10 | 36 | 15 | 15 | 14 | 11 | 11 | 12 |
| 16 | 5 | 8 | 10 | 42 | 16 | 16 | 14 | 12 | 11 | 12 |
| 17 | 5 | 12 | 10 | 47 | 17 | 17 | 16 | 13 | 12 | 13 |
| 18 | 5 | 16 | 10 | 53 | 18 | 19 | 18 | 14 | 15 | 14 |
| 19 | 5 | 19 | 10 | 58 | 19 | 20 | 20 | 15 | 14 | 16 |
| 20 | 5 | 23 | 11 | 4 | 20 | 21 | 21 | 15 | 17 | 17 |
| 21 | 5 | 27 | 11 | 10 | 21 | 22 | 22 | 18 | 17 | 18 |
| 22 | 5 | 30 | 11 | 15 | 22 | 23 | 27 | 19 | 19 | 19 |
| 23 | 5 | 34 | 11 | 21 | 23 | 26 | 25 | 21 | 20 | 20 |
| 24 | 5 | 38 | 11 | 26 | 24 | 24 | 24 | 22 | 21 | 21 |
| 25 | 5 | 42 | 11 | 32 | 25 | 27 | 21 | 26 | 23 | 23 |
| 26 | 5 | 46 | 11 | 38 | 26 | 28 | 28 | 24 | 26 | 27 |
| 27 | 5 | 49 | 11 | 43 | 27 | 30 | 29 | 26 | 24 | 24 |
| 28 | 5 | 53 | 11 | 49 | 28 | 30 | 30 | 28 | 24 | 24 |
| 29 | 5 | 56 | 11 | 54 | 29 | sign 1 | sign | 29 | 26 | 26 |
| 30 | 6 | 0 | 12 | 0 | 30 | 3 | 3 | 30 | 28 | 28 |

Septentrionalis

# Tabula latitudinis lune Septentrionalis

| | | Latitudo 0 et ascendens | | | Latitudo 1 et ascendens | | | Latitudo 2 et ascendens | | | Latitudo 3 et descendens | | | Latitudo 4 et descendens | | | Latitudo 5 et descendens | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | |
| G | G | G | m | 2 | G | m | 2 | G | m | 2 | G | m | 2 | G | m | 2 | G | m | 2 | G |
| 1 | | 0 | 5 | 13 | 2 | 34 | 26 | 4 | 22 | 22 | 4 | 59 | 58 | 4 | 11 | 7 | 2 | 25 | 11 | 29 |
| 2 | 29 | 0 | 10 | 27 | 2 | 38 | 52 | 4 | 24 | 51 | 4 | 59 | 50 | 4 | 14 | 22 | 2 | 20 | 40 | 28 |
| 3 | 28 | 0 | 15 | 40 | 2 | 44 | 57 | 4 | 27 | 14 | 4 | 59 | 35 | 4 | 11 | 39 | 2 | 16 | 2 | 27 |
| 4 | 27 | 0 | 20 | 53 | 2 | 47 | 39 | 4 | 29 | 34 | 4 | 59 | 15 | 4 | 8 | 37 | 2 | 11 | 24 | 26 |
| 5 | 26 | 0 | 26 | 7 | 2 | 51 | 57 | 4 | 31 | 49 | 4 | 58 | 51 | 4 | 5 | 38 | 2 | 6 | 40 | 25 |
| 6 | 25 | 0 | 31 | 19 | 2 | 56 | 10 | 4 | 37 | 59 | 4 | 58 | 25 | 4 | 2 | 37 | 2 | 1 | 56 | 24 |
| 7 | 24 | 0 | 36 | 32 | 3 | 0 | 24 | 4 | 36 | 4 | 4 | 57 | 45 | 3 | 59 | 28 | 1 | 57 | 8 | 23 |
| 8 | 23 | 0 | 41 | 42 | 3 | 4 | 29 | 4 | 38 | 4 | 4 | 57 | 4 | 3 | 56 | 10 | 1 | 52 | 17 | 22 |
| 9 | 22 | 0 | 46 | 52 | 3 | 8 | 35 | 4 | 40 | 0 | 4 | 56 | 17 | 3 | 53 | 0 | 1 | 47 | 23 | 21 |
| 10 | 21 | 0 | 52 | 1 | 3 | 12 | 39 | 4 | 41 | 52 | 4 | 55 | 25 | 3 | 49 | 40 | 1 | 42 | 27 | 20 |
| 11 | 20 | 0 | 57 | 9 | 3 | 16 | 39 | 4 | 43 | 38 | 4 | 54 | 28 | 3 | 46 | 17 | 1 | 37 | 29 | 19 |
| 12 | 19 | 1 | 2 | 16 | 3 | 20 | 35 | 4 | 45 | 18 | 4 | 53 | 25 | 3 | 42 | 49 | 1 | 32 | 31 | 18 |
| 13 | 18 | 1 | 7 | 23 | 3 | 24 | 26 | 4 | 46 | 52 | 4 | 52 | 17 | 3 | 39 | 17 | 1 | 27 | 33 | 17 |
| 14 | 17 | 1 | 12 | 30 | 3 | 28 | 15 | 4 | 48 | 20 | 4 | 51 | 3 | 3 | 35 | 41 | 1 | 22 | 35 | 16 |
| 15 | 16 | 1 | 17 | 36 | 3 | 32 | 0 | 4 | 49 | 44 | 4 | 49 | 44 | 3 | 32 | 0 | 1 | 17 | 36 | 15 |
| 16 | 15 | 1 | 22 | 35 | 3 | 35 | 41 | 4 | 51 | 3 | 4 | 48 | 20 | 3 | 28 | 15 | 1 | 12 | 30 | 14 |
| 17 | 14 | 1 | 27 | 33 | 3 | 39 | 17 | 4 | 52 | 17 | 4 | 46 | 52 | 3 | 24 | 26 | 1 | 7 | 23 | 13 |
| 18 | 13 | 1 | 32 | 31 | 3 | 42 | 49 | 4 | 53 | 25 | 4 | 45 | 18 | 3 | 20 | 35 | 1 | 2 | 16 | 12 |
| 19 | 12 | 1 | 37 | 29 | 3 | 46 | 17 | 4 | 54 | 28 | 4 | 43 | 38 | 3 | 16 | 39 | 0 | 57 | 9 | 11 |
| 20 | 11 | 1 | 42 | 27 | 3 | 49 | 40 | 4 | 55 | 25 | 4 | 41 | 52 | 3 | 12 | 39 | 0 | 52 | 1 | 10 |
| 21 | 10 | 1 | 47 | 23 | 3 | 53 | 0 | 4 | 56 | 17 | 4 | 40 | 0 | 3 | 8 | 35 | 0 | 46 | 52 | 9 |
| 22 | 9 | 1 | 52 | 17 | 3 | 56 | 10 | 4 | 57 | 4 | 4 | 38 | 4 | 3 | 4 | 29 | 0 | 41 | 42 | 8 |
| 23 | 8 | 1 | 57 | 8 | 3 | 59 | 28 | 4 | 57 | 45 | 4 | 36 | 4 | 3 | 0 | 24 | 0 | 36 | 32 | 7 |
| 24 | 7 | 2 | 1 | 56 | 4 | 2 | 37 | 4 | 58 | 25 | 4 | 33 | 29 | 2 | 56 | 10 | 0 | 31 | 19 | 6 |
| 25 | 6 | 2 | 6 | 40 | 4 | 5 | 38 | 4 | 58 | 51 | 4 | 31 | 49 | 2 | 51 | 57 | 0 | 26 | 7 | 5 |
| 26 | 5 | 2 | 11 | 22 | 4 | 8 | 37 | 4 | 59 | 15 | 4 | 29 | 34 | 2 | 47 | 39 | 0 | 20 | 53 | 4 |
| 27 | 4 | 2 | 16 | 2 | 4 | 11 | 39 | 4 | 59 | 35 | 4 | 27 | 14 | 2 | 44 | 57 | 0 | 15 | 40 | 3 |
| 28 | 3 | 2 | 20 | 40 | 4 | 14 | 22 | 4 | 59 | 50 | 4 | 24 | 51 | 2 | 38 | 52 | 0 | 10 | 27 | 2 |
| 29 | 2 | 2 | 25 | 11 | 4 | 11 | 7 | 4 | 59 | 58 | 4 | 22 | 22 | 2 | 34 | 26 | 0 | 5 | 13 | 1 |
| 30 | 1 | 2 | 29 | 52 | 4 | 19 | 47 | 5 | 0 | 0 | 4 | 19 | 47 | 2 | 29 | 52 | 0 | 0 | 0 | 0 |
| | 6 | | 11 | | | 10 | | | 9 | | | 8 | | | 7 | | | 6 | | |

Tabula equationis dierum cum noctibus Meridionalis

| | ♈ | ♉ | ♊ | ♋ | ♌ | ♍ | ♎ | ♏ | ♐ | ♑ | ♒ | ♓ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G | m | m | m | m | m | m | m | m | m | m | m | m |
| 1 | 9 | 19 | 22 | 17 | 12 | 15 | 25 | 31 | 27 | 14 | 2 | 1 |
| 2 | 9 | 19 | 22 | 17 | 12 | 15 | 25 | 31 | 27 | 13 | 1 | 1 |
| 3 | 10 | 19 | 22 | 17 | 12 | 16 | 25 | 31 | 26 | 13 | 1 | 1 |
| 4 | 10 | 19 | 22 | 16 | 12 | 16 | 25 | 31 | 26 | 12 | 1 | 1 |
| 5 | 10 | 20 | 22 | 16 | 12 | 16 | 26 | 31 | 26 | 12 | 1 | 1 |
| 6 | 11 | 20 | 22 | 16 | 12 | 16 | 26 | 31 | 25 | 11 | 0 | 2 |
| 7 | 11 | 20 | 22 | 16 | 12 | 17 | 26 | 31 | 25 | 11 | 0 | 2 |
| 8 | 11 | 20 | 22 | 16 | 12 | 17 | 27 | 31 | 25 | 10 | 0 | 2 |
| 9 | 12 | 21 | 22 | 15 | 12 | 17 | 27 | 31 | 25 | 10 | 0 | 2 |
| 10 | 12 | 21 | 21 | 15 | 12 | 18 | 28 | 31 | 24 | 9 | 0 | 3 |
| 11 | 13 | 21 | 21 | 15 | 12 | 18 | 28 | 30 | 24 | 9 | 0 | 3 |
| 12 | 13 | 21 | 21 | 15 | 12 | 18 | 28 | 30 | 24 | 9 | 0 | 3 |
| 13 | 13 | 21 | 21 | 15 | 13 | 19 | 28 | 30 | 23 | 8 | 0 | 3 |
| 14 | 14 | 21 | 21 | 14 | 13 | 19 | 28 | 30 | 23 | 8 | 0 | 4 |
| 15 | 14 | 21 | 21 | 14 | 13 | 19 | 29 | 30 | 23 | 7 | 0 | 4 |
| 16 | 14 | 22 | 20 | 14 | 13 | 20 | 29 | 30 | 21 | 7 | 0 | 4 |
| 17 | 15 | 22 | 20 | 14 | 13 | 20 | 29 | 30 | 21 | 6 | 0 | 4 |
| 18 | 15 | 22 | 20 | 14 | 13 | 20 | 30 | 29 | 20 | 6 | 0 | 5 |
| 19 | 15 | 22 | 20 | 14 | 13 | 21 | 30 | 29 | 20 | 5 | 0 | 5 |
| 20 | 16 | 22 | 20 | 13 | 13 | 21 | 30 | 29 | 19 | 5 | 0 | 5 |
| 21 | 16 | 22 | 19 | 13 | 13 | 21 | 30 | 29 | 19 | 5 | 0 | 6 |
| 22 | 16 | 22 | 19 | 13 | 13 | 22 | 30 | 28 | 18 | 4 | 0 | 6 |
| 23 | 17 | 22 | 19 | 13 | 14 | 22 | 31 | 28 | 18 | 4 | 0 | 6 |
| 24 | 17 | 22 | 18 | 13 | 14 | 23 | 31 | 28 | 17 | 4 | 0 | 7 |
| 25 | 17 | 22 | 18 | 13 | 14 | 23 | 31 | 28 | 17 | 3 | 0 | 7 |
| 26 | 18 | 22 | 18 | 13 | 14 | 23 | 31 | 28 | 16 | 3 | 0 | 7 |
| 27 | 18 | 22 | 18 | 13 | 15 | 23 | 31 | 27 | 16 | 3 | 0 | 8 |
| 28 | 18 | 22 | 18 | 12 | 15 | 24 | 31 | 27 | 15 | 2 | 0 | 8 |
| 29 | 18 | 22 | 18 | 12 | 15 | 24 | 31 | 27 | 15 | 2 | 1 | 8 |
| 30 | 19 | 22 | 17 | 12 | 15 | 24 | 31 | 27 | 15 | 2 | 1 | 9 |

Tabula ad inveniendum almanach singulis annis

Tabula veri motus lune continuando

| G | m | S | G | m | 2 | d | m | 2 |
|---|---|---|---|---|---|---|---|---|
| 11 | 30 | 1 | 12 | 29 | 30 | 1 | 0 | 24 |
| 11 | 40 | 1 | 12 | 25 | 40 | 2 | 0 | 48 |
| 11 | 50 | 1 | 12 | 21 | 50 | 3 | 1 | 9 |
| 12 | 0 | 1 | 12 | 18 | 0 | 4 | 1 | 33 |
| 12 | 10 | 1 | 12 | 14 | 10 | 5 | 1 | 57 |
| 12 | 20 | 1 | 12 | 10 | 20 | 6 | 2 | 18 |
| 12 | 30 | 1 | 12 | 6 | 30 | 7 | 2 | 44 |
| 12 | 40 | 1 | 12 | 2 | 40 | 8 | 3 | 8 |
| 12 | 50 | 1 | 11 | 58 | 50 | 9 | 3 | 25 |
| 13 | 0 | 1 | 11 | 55 | 0 | 10 | 3 | 50 |
| 13 | 10 | 1 | 11 | 51 | 10 | | | |
| 13 | 20 | 1 | 11 | 47 | 20 | | | |
| 13 | 30 | 1 | 11 | 43 | 30 | | | |
| 13 | 40 | 1 | 11 | 39 | 40 | | | |
| 13 | 50 | 1 | 11 | 35 | 50 | | | |
| 14 | 0 | 1 | 11 | 32 | 0 | | | |
| 14 | 10 | 1 | 11 | 28 | 10 | | | |
| 14 | 20 | 1 | 11 | 24 | 20 | | | |
| 14 | 30 | 1 | 11 | 20 | 30 | | | |
| 14 | 40 | 1 | 11 | 16 | 40 | | | |
| 14 | 50 | 1 | 11 | 12 | 50 | | | |
| 15 | 0 | 1 | 11 | 9 | 0 | | | |
| 15 | 10 | 1 | 11 | 5 | 10 | | | |
| 15 | 20 | 1 | 11 | 1 | 20 | | | |
| 15 | 30 | 1 | 10 | 57 | 30 | | | |

Linea [illegible]

[illegible] et 18 [illegible] 4 [illegible]

Nota quod istam tabulam [illegible] Habebis almanach in hac [illegible] almanach [illegible] ad unum annum [illegible]

[illegible]

# Tabula latitudinum planetarum Superior

| linea numeri argumenti per 6 | Latitudo Saturni ... septentrionalis (g) | (m) | Saturni meridionalis (g) | (m) | Latitudo Iovis ... septentrionalis (g) | (m) | Iovis meridionalis (g) | (m) | Latitudo Martis septentrionalis (g) | (m) | Martis meridionalis (g) | (m) | Latitudo Veneris declinatio (g) | (m) | Veneris reflexio (g) | (m) | Latitudo Mercurii declinatio (g) | (m) | Mercurii reflexio (g) | (m) | Minuta proportionalia (m) | (2) | linea numeri per 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 2 | 4 | 2 | 3 | 1 | 7 | 1 | 5 | 0 | 7 | 0 | 3 | 1 | 2 | 0 | 8 | 1 | 45 | 0 | 11 | 59 | 36 | 354 |
| 12 | 2 | [illegible] | 2 | 3 | 1 | 8 | 1 | 6 | 0 | 9 | 0 | 4 | 1 | 1 | 0 | 16 | 1 | 44 | 0 | 22 | 58 | 36 | 348 |
| 18 | 2 | 6 | 2 | 4 | 1 | 8 | 1 | 6 | 0 | 11 | 0 | 5 | 1 | 0 | 0 | 29 | 1 | 43 | 0 | 33 | 57 | 0 | 342 |
| 24 | 2 | 7 | 2 | 5 | 1 | 9 | 1 | 7 | 0 | 13 | 0 | 5 | 0 | 49 | 0 | 33 | 1 | 40 | 0 | 44 | 54 | 36 | 336 |
| 30 | 2 | 8 | 2 | 6 | 1 | 10 | 1 | 8 | 0 | 14 | 0 | [illegible] | 0 | 51 | 0 | 41 | 1 | 36 | 0 | 55 | 52 | 0 | 330 |
| 36 | 2 | 10 | 2 | 7 | 1 | 11 | 1 | 9 | 0 | 16 | 0 | 9 | 0 | 54 | 0 | 49 | 1 | 30 | 1 | 6 | 48 | 24 | 324 |
| 42 | 2 | 11 | 2 | 8 | 1 | 12 | 1 | 10 | 0 | 18 | 0 | 14 | 0 | 50 | 0 | 51 | 1 | 23 | 1 | 17 | 44 | 24 | 318 |
| 48 | 2 | 12 | 2 | 10 | 1 | 13 | 1 | 11 | 0 | 21 | 0 | 15 | 0 | 46 | 1 | 5 | 1 | 14 | 1 | 26 | 40 | 0 | 312 |
| 54 | 2 | 14 | 2 | 13 | 1 | 14 | 1 | 15 | 0 | 24 | 0 | 18 | 0 | 41 | 1 | 13 | 1 | 8 | 1 | 35 | 35 | 12 | 306 |
| 60 | 2 | 16 | 2 | 14 | 1 | 16 | 1 | 16 | 0 | 28 | 0 | 22 | 0 | 36 | 1 | 20 | 0 | 49 | 1 | 44 | 30 | 0 | 300 |
| 66 | 2 | 18 | 2 | 18 | 1 | 19 | 1 | 18 | 0 | 34 | 0 | 26 | 0 | 39 | 1 | 26 | 0 | 49 | 1 | 52 | 24 | 24 | 294 |
| 72 | 2 | 21 | 2 | 21 | 1 | 20 | 1 | 24 | 0 | 36 | 0 | 30 | 0 | 25 | 1 | 34 | 0 | 38 | 2 | 0 | 18 | 24 | 288 |
| 78 | 2 | 24 | 2 | 24 | 1 | 24 | 1 | 24 | 0 | 40 | 0 | 36 | 0 | 16 | 1 | 43 | 0 | 26 | 2 | 7 | 12 | 24 | 282 |
| 84 | 2 | 27 | 2 | 27 | 1 | 27 | 1 | 27 | 0 | 46 | 0 | 44 | 0 | 8 | 1 | 50 | 0 | 16 | 2 | 14 | 6 | 24 | 276 |
| 90 | 2 | 30 | 2 | 30 | 1 | 30 | 1 | 30 | 0 | 52 | 0 | 49 | 0 | 0 | 1 | 55 | 0 | 0 | 2 | 20 | 0 | 0 | 270 |

## Inferior

| linea numeri | Sat. sept. (g) | (m) | Sat. merid. (g) | (m) | Iov. sept. (g) | (m) | Iov. merid. (g) | (m) | Mart. sept. (g) | (m) | Mart. merid. (g) | (m) | Ven. decl. (g) | (m) | Ven. refl. (g) | (m) | Merc. decl. (g) | (m) | Merc. refl. (g) | (m) | Min. prop. (m) | (2) | linea numeri |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 96 | 2 | 34 | 2 | 33 | 1 | 37 | 1 | 37 | 0 | 50 | 0 | 56 | 0 | 10 | 2 | 3 | 0 | 15 | 2 | 25 | 6 | 24 | 264 |
| 102 | 2 | 36 | 2 | 36 | 1 | 36 | 1 | 36 | 1 | 6 | 1 | 4 | 0 | 20 | 2 | 9 | 0 | 31 | 2 | 28 | 12 | 24 | 258 |
| 108 | 2 | 39 | 2 | 39 | 1 | 39 | 1 | 39 | 1 | 14 | 1 | 13 | 0 | 32 | 2 | 14 | 0 | 48 | 2 | 29 | 18 | 24 | 252 |
| 114 | 2 | 42 | 2 | 42 | 1 | 42 | 1 | 42 | 1 | 23 | 1 | 24 | 0 | 45 | 2 | 20 | 1 | 6 | 2 | 30 | 24 | 24 | 246 |
| 120 | 2 | 45 | 2 | 45 | 1 | 45 | 1 | 45 | 1 | 32 | 1 | 37 | 0 | 59 | 2 | 25 | 1 | 24 | 2 | 25 | 30 | 0 | 240 |
| 126 | 2 | 47 | 2 | 48 | 1 | 48 | 1 | 48 | 1 | 47 | 1 | 50 | 1 | 13 | 2 | 28 | 1 | 44 | 2 | 36 | 35 | 12 | 234 |
| 132 | 2 | 50 | 2 | 50 | 1 | 50 | 1 | 50 | 2 | 1 | 2 | 40 | 1 | 38 | 2 | 30 | 2 | 6 | 2 | 20 | 40 | 0 | 228 |
| 138 | 2 | 53 | 2 | 52 | 1 | 55 | 1 | 54 | 2 | 16 | 2 | 37 | 1 | 51 | 2 | 30 | 2 | 26 | 2 | 11 | 44 | 24 | 222 |
| 144 | 2 | 55 | 2 | 56 | 1 | 57 | 1 | 57 | 2 | 34 | 2 | 50 | 2 | 23 | 2 | 25 | 2 | 41 | 2 | 0 | 48 | 24 | 216 |
| 150 | 2 | 57 | 2 | 45 | [illegible] | 48 | 2 | 0 | 2 | 55 | 3 | 29 | 3 | 3 | 2 | 22 | 3 | 7 | 1 | 54 | 52 | 0 | 210 |
| 156 | 2 | 59 | 3 | [illegible] | 2 | 3 | 2 | 3 | 3 | 16 | 4 | 9 | 3 | 53 | 2 | 12 | 3 | 26 | 1 | 29 | 54 | 36 | 204 |
| 162 | 3 | 0 | 3 | [illegible] | 2 | [illegible] | 2 | 5 | 3 | 38 | 4 | 55 | 4 | 26 | 1 | 55 | 3 | 42 | 1 | 10 | 56 | 0 | 198 |
| 168 | 3 | 1 | 3 | [illegible] | 2 | [illegible] | 2 | 6 | 4 | 0 | 5 | 43 | 5 | 39 | 1 | 21 | 3 | 52 | 0 | 46 | 58 | 36 | 192 |
| 174 | 3 | 2 | 3 | [illegible] | 2 | [illegible] | 2 | 7 | 4 | 16 | 6 | 26 | 6 | 29 | 0 | 48 | 4 | 2 | 0 | 28 | 59 | 36 | 186 |
| 180 | 3 | [illegible] | 3 | [illegible] | 2 | [illegible] | 2 | 8 | 4 | 20 | 7 | 30 | 7 | 42 | 0 | 0 | 4 | 5 | 0 | 0 | 60 | 0 | 180 |

Introitus ☉ in 12 signa anno 1446

| Tempus inequale d | h | m | 2 | 3 | | Tempus equale d | h | m | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 20 | 31 | 16 | 29 | Ja | 10 | 20 | 40 | 4 | 29 |
| 9 | 11 | 28 | 20 | 9 | Fe | 9 | 11 | 28 | 44 | 9 |
| 10 | 18 | 31 | 27 | 19 | Ma | 10 | 16 | 31 | 33 | 29 |
| 10 | 7 | 39 | 10 | 3 | Ap | 10 | 7 | 21 | 13 | 3 |
| 11 | 15 | 19 | 17 | 18 | Ma | 11 | 13 | 40 | 37 | 48 |
| 12 | 12 | 2 | 56 | 53 | Iun | 12 | 2 | 19 | 16 | 41 |
| 13 | 14 | 18 | 28 | 10 | Iul | 13 | 14 | 9 | 32 | 11 |
| 13 | 21 | 8 | 40 | 16 | Aug | 13 | 21 | 23 | 8 | 16 |
| 13 | 15 | 16 | 41 | 28 | Sep | 13 | 11 | 20 | 41 | 38 |
| 13 | 18 | 43 | [illegible] | 29 | Oc | 13 | 19 | 18 | 21 | 48 |
| 12 | 10 | 6 | 14 | 12 | No | 12 | 10 | 38 | 21 | 52 |
| 11 | 18 | 18 | 16 | 29 | De | 11 | 18 | 33 | 52 | 29 |

d h m 2 3 adde: 7 49 17 49

Ascensiones in circulo recto pro introitu ☉ in 12 signa anno 1446 — signa cum continuatione ...

| | G | m | 2 | 3 | | S | G | m | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|---|
| ♈ | 22 | 2 | 38 | 30 | ♈ | 30 | 9 | 13 | 28 | 42 |
| ♉ | 14 | 9 | 13 | 16 | ♉ | 27 | 1 | 11 | 51 | 42 |
| ♊ | 12 | 7 | 2 | 49 | ♊ | 21 | 6 | 44 | 41 | 42 |
| ♋ | 26 | 7 | 29 | 42 | ♋ | 31 | 2 | 51 | 19 | 21 |
| ♌ | 31 | 2 | 22 | 3 | ♌ | 0 | 9 | 41 | 2 | 42 |
| ♍ | 11 | 4 | 37 | 4 | ♍ | 20 | 2 | 48 | 3 | 42 |
| ♎ | 4 | 2 | 12 | 11 | ♎ | 16 | 0 | 11 | 40 | 11 |
| ♏ | 13 | 9 | 51 | 51 | ♏ | 22 | 1 | 29 | 19 | 41 |
| ♐ | 3 | 9 | 12 | 28 | ♐ | 12 | 6 | 31 | 11 | 21 |
| ♑ | 19 | 1 | 9 | 1 | ♑ | 21 | 8 | 28 | 1 | 12 |
| ♒ | 24 | 4 | 51 | 1 | ♒ | 36 | 2 | 16 | 1 | 12 |
| ♓ | 14 | 4 | 19 | 2 | ♓ | 23 | 3 | 18 | 2 | 12 |

S m 2 3 adde: 8 1 18 49 42

Tabula per quam scitur meridies omnis diei et per consequens redentur hore meridiei ad horas horalogii per solam additionem

| | Januarius | h | m | Februarius | h | m | Marcius | h | m | Aprilis | h | m | Maius | h | m | Junius | h | m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ci | 19 | 58 | bri | 19 | 10 | ma | 18 | 19 | ap | 17 | 18 | ph | 16 | 30 | nic | 15 | 58 |
| 2 | st | 19 | 53 | pur | 19 | 8 | ri | 18 | 17 | pul | 17 | 16 | lip | 16 | 29 | mar | 15 | 57 |
| 3 | o | 19 | 52 | bla | 19 | 7 | ub | 18 | 16 | m | 17 | 14 | cru | 16 | 28 | rel | 15 | 57 |
| 4 | ia | 19 | 50 | jsi | 19 | 5 | a | 18 | 12 | am | 17 | 13 | flor | 16 | 26 | h | 15 | 56 |
| 5 | ms | 19 | 49 | ag | 19 | 3 | dei | 18 | 11 | bro | 17 | 12 | got | 16 | 25 | bo | 15 | 56 |
| 6 | e | 19 | 48 | dor | 19 | 2 | a | 18 | 10 | si | 17 | 10 | io | 16 | 23 | m | 15 | 56 |
| 7 | pri | 19 | 47 | se | 19 | 0 | per | 18 | 8 | i | 17 | 9 | ian | 16 | 22 | dat | 15 | 56 |
| 8 | s | 19 | 46 | bri | 18 | 58 | de | 18 | 6 | ss | 17 | 7 | sta | 16 | 21 | me | 15 | 55 |
| 9 | s | 19 | 44 | ap | 18 | 56 | a | 18 | 4 | ub | 17 | 5 | nib | 16 | 20 | pri | 15 | 55 |
| 10 | ven | 19 | 43 | sco | 18 | 55 | ra | 18 | 2 | o | 17 | 3 | c | 16 | 19 | mi | 15 | 55 |
| 11 | di | 19 | 42 | las | 18 | 53 | ue | 18 | 0 | nat | 17 | 2 | pe | 16 | 18 | ba | 15 | 55 |
| 12 | rat | 19 | 40 | h | 18 | 51 | gre | 17 | 58 | at | 17 | 0 | ne | 16 | 17 | re | 15 | 55 |
| 13 | or | 19 | 39 | ra | 18 | 50 | go | 17 | 57 | q | 16 | 58 | ser | 16 | 16 | vi | 15 | 55 |
| 14 | s | 19 | 38 | va | 18 | 47 | vi | 17 | 55 | ti | 16 | 56 | z | 16 | 15 | m | 15 | 55 |
| 15 | h | 19 | 30 | lem | 18 | 45 | o | 17 | 52 | bur | 16 | 55 | soph | 16 | 13 | vi | 15 | 55 |
| 16 | ma | 19 | 35 | iu | 18 | 43 | ar | 17 | 50 | n | 16 | 54 | ma | 16 | 12 | tc | 15 | 55 |
| 17 | an | 19 | 34 | h | 18 | 42 | ger | 17 | 48 | et | 16 | 52 | nib | 16 | 11 | q | 15 | 56 |
| 18 | pri | 19 | 32 | con | 18 | 40 | dem | 17 | 46 | va | 16 | 51 | m | 16 | 10 | ma | 15 | 56 |
| 19 | fla | 19 | 31 | vim | 18 | 38 | al | 17 | 45 | le | 16 | 50 | at | 16 | 9 | pro | 15 | 56 |
| 20 | fab | 19 | 30 | gt | 18 | 36 | ba | 17 | 43 | pan | 16 | 48 | se | 16 | 8 | tho | 15 | 56 |
| 21 | ag | 19 | 28 | tin | 18 | 34 | be | 17 | 41 | chi | 16 | 46 | va | 16 | 7 | al | 15 | 57 |
| 22 | vin | 19 | 26 | pe | 18 | 32 | ne | 17 | 39 | ge | 16 | 44 | e | 16 | 6 | pan | 15 | 57 |
| 23 | ten | 19 | 25 | ku | 18 | 30 | vim | 17 | 37 | ge | 16 | 43 | te | 16 | 5 | chi | 15 | 57 |
| 24 | ti | 19 | 23 | ma | 18 | 28 | sta | 17 | 35 | de | 16 | 42 | uet | 16 | 4 | io | 15 | 58 |
| 25 | pau | 19 | 21 | tip | 18 | 26 | ma | 17 | 33 | ma | 16 | 40 | vr | 16 | 3 | han | 15 | 58 |
| 26 | po | 19 | 20 | am | 18 | 25 | ue | 17 | 31 | ri | 16 | 38 | ban | 16 | 2 | io | 15 | 59 |
| 27 | io | 19 | 18 | m | 18 | 23 | a | 17 | 29 | q | 16 | 37 | m | 16 | 1 | dor | 15 | 59 |
| 28 | b | 19 | 17 | de | 18 | 21 | gr | 17 | 27 | vi | 16 | 35 | ye | 16 | 0 | le | 16 | 0 |
| 29 | le | 19 | 15 | ma | ~~18~~ | | m | 17 | 26 | ta | 16 | 34 | de | 15 | 59 | pe | 16 | 1 |
| 30 | ba | 19 | 14 | | | | tri | 17 | 25 | ub | 16 | 32 | ruf | 15 | 59 | paul | 16 | 1 |
| 31 | me | 19 | 12 | | | | re | 17 | 21 | | | | pan | 15 | 58 | | | |
| | | h | m | | h | m | | h | m | | h | m | | h | m | | h | m |

| | Julius | h | m | Augustus | h | m | September | h | m | October | h | m | Novembris | h | m | December | h | m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ud | 16 | 2 | pe | 16 | 40 | e | 17 | 33 | re | 18 | 32 | om | 19 | 26 | de. de | 20 | 3 |
| 2 | pro | 16 | 3 | steph | 16 | 41 | gi | 17 | 34 | im | 18 | 34 | ne | 19 | 28 | rem rem | 20 | 3 |
| 3 | tr | 16 | 4 | steph | 16 | 42 | di | 17 | 37 | ip | 18 | 36 | no | 19 | 30 | ber ber | 20 | 3 |
| 4 | v | 16 | 5 | pro | 16 | 43 | vin | 17 | 39 | fra | 18 | 38 | ne | 19 | 31 | bar bar | 20 | 3 |
| 5 | dal | 16 | 6 | tho | 16 | 45 | sep | 17 | 41 | rf | 18 | 40 | bre | 19 | 32 | ba ba | 20 | 4 |
| 6 | or | 16 | 7 | sx | 16 | 46 | ha | 17 | 43 | ruf | 18 | 42 | le | 19 | 34 | m m | 20 | 4 |
| 7 | wi | 16 | 8 | to | 16 | 48 | bet | 17 | 45 | ma | 18 | 43 | o | 19 | 35 | ro ro | 20 | 4 |
| 8 | ki | 16 | 9 | ci | 16 | 49 | nat | 17 | 47 | rub | 18 | 45 | qua | 19 | 36 | con con | 20 | 4 |
| 9 | li | 16 | 11 | ro | 16 | 50 | gor | 17 | 50 | di | 18 | 47 | the | 19 | 38 | rep rep | 20 | 5 |
| 10 | fra | 16 | 12 | lau | 16 | 51 | gon | 17 | 53 | ger | 18 | 49 | o | 19 | 39 | 7 | 20 | 5 |
| 11 | be | 16 | 13 | ti | 16 | 53 | pro | 17 | 55 | az | 18 | 51 | ma | 19 | 40 | al | 20 | 5 |
| 12 | ne | 16 | 14 | bur | 16 | 55 | ia | 17 | 57 | te | 18 | 53 | bru | 19 | 42 | ma | 20 | 5 |
| 13 | ma | 16 | 16 | yp | 16 | 56 | ri | 17 | 58 | q | 18 | 55 | bric | 19 | 43 | lu | 20 | 5 |
| 14 | gor | 16 | 18 | eu | 16 | 58 | cru | 18 | 0 | cal | 18 | 56 | ri | 19 | 44 | a | 20 | 5 |
| 15 | a | 16 | 19 | ass | 17 | 0 | nic | 18 | 2 | lut | 18 | 58 | 1 | 19 | 45 | a | 20 | 5 |
| 16 | pop | 16 | 20 | a | 17 | 2 | cu | 18 | 4 | gal | 19 | 0 | q | 19 | 47 | sar | 20 | 4 |
| 17 | al | 16 | 21 | o | 17 | 3 | lam | 18 | 6 | le | 19 | 2 | pat | 19 | 48 | tub | 20 | 4 |
| 18 | az | 16 | 22 | a | 17 | 5 | pax | 18 | 8 | lu | 19 | 3 | lsr | 19 | 49 | ab | 20 | [illegible] |
| 19 | nol | 16 | 23 | ga | 17 | 7 | h | 18 | 10 | cal | 19 | 5 | e | 19 | 50 | m | 20 | [illegible] |
| 20 | plig | 16 | 24 | pi | 17 | 9 | q | 18 | 12 | vel | 19 | 7 | h | 19 | 51 | de | 20 | [illegible] |
| 21 | prax | 16 | 25 | tim | 17 | 11 | mat | 18 | 13 | vn | 19 | 8 | za | 19 | 52 | tho | 20 | [illegible] |
| 22 | mag | 16 | 26 | ti | 17 | 13 | mau | 18 | 16 | s | 19 | 10 | ce | 19 | 53 | mas | 20 | [illegible] |
| 23 | ap | 16 | 28 | mo | 17 | 14 | zi | 18 | 17 | s | 19 | 12 | cle | 19 | 54 | mo | 20 | 3 |
| 24 | reus | 16 | 29 | bar | 17 | 16 | o | 18 | 19 | vel | 19 | 13 | cris | 19 | 56 | do | 20 | 2 |
| 25 | ia | 16 | 30 | lud | 17 | 18 | vn | 18 | 21 | cris | 19 | 14 | ka | 19 | 58 | nat | 20 | 2 |
| 26 | ro | 16 | 31 | ro | 17 | 20 | ct | 18 | 23 | pi | 19 | 15 | the | 19 | 59 | steph | 20 | 2 |
| 27 | ch | 16 | 32 | ruf | 17 | 22 | da | 18 | 24 | mi | 19 | 16 | za | 20 | 0 | io | 20 | [illegible] |
| 28 | q | 16 | 34 | aus | 17 | 24 | ue | 18 | 26 | s | 19 | 20 | ma | 20 | 1 | pue | 19 | 59 |
| 29 | sim | 16 | 35 | col | 17 | 26 | mich | 18 | 28 | mo | 19 | 21 | sat | 20 | 2 | to | 19 | 58 |
| 30 | ab | 16 | 37 | aug | 17 | 28 | ier | 18 | 30 | nib | 19 | 23 | an | 20 | 2 | me | 19 | 56 |
| 31 | don | 16 | 38 | h | 17 | 30 | | | | qui | 19 | 24 | | | | Al. | 19 | 55 |

Coniunctio magna [illegible]

♄ 7 4 m [illegible]

[illegible]

Hec tabula inveniendi introitus ☉ in Arietem

| D | h | m | 2 | 3 |
|---|---|---|---|---|
| 1 | 5 | 49 | 15 | 59 |
| 2 | 11 | 38 | 31 | 58 |
| 3 | 17 | 27 | 47 | 56 |
| 4 | 23 | 17 | 3 | 55 |
| 5 | 5 | 6 | 19 | 54 |
| 6 | 10 | 55 | 35 | 53 |
| 7 | 16 | 44 | 51 | 52 |
| 8 | 22 | 34 | 7 | 51 |
| 9 | 4 | 23 | 23 | 49 |
| 10 | 10 | 12 | 39 | 48 |
| 11 | 16 | 1 | 57 | 47 |
| 12 | 21 | 51 | 19 | 46 |
| 13 | 3 | 40 | 24 | 45 |
| 14 | 9 | 29 | 49 | 44 |
| 15 | 15 | 19 | 50 | 42 |
| 16 | 21 | 8 | 12 | 39 |
| 17 | 2 | 57 | 27 | 38 |
| 18 | 8 | 46 | 43 | 37 |
| 19 | 14 | 35 | 49 | 36 |
| 20 | 20 | 25 | 15 | 35 |
| 40 | 16 | 50 | 30 | 8 |
| 60 | 13 | 16 | 0 | 42 |
| 80 | 9 | 41 | 28 | 16 |
| 100 | 6 | 6 | 40 | 20 |
| 200 | 12 | 13 | 20 | 40 |
| 300 | 18 | 20 | 0 | 30 |
| 400 | 0 | 26 | 40 | 20 |
| 500 | 6 | 33 | 20 | 10 |
| 600 | 12 | 40 | 0 | 0 |
| 700 | 18 | 46 | 40 | 50 |
| 800 | 0 | 53 | 20 | 40 |

Introitus Solis in arietem et alia signa cardinalia Anno domini 1468 ad meridiem Cracoviensem ubi elevatio poli 50 graduum

[illegible]

| | D | h | m | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| ♈ | 10 | 12 | 22 | 41 | 49 | 22 | 57 | 36 |
| ♋ | 11 | 23 | 47 | 38 | 13 | 46 | 1 | 26 |
| ♎ | 13 | 12 | 41 | 52 | 2 | 48 | 0 | 0 |
| ♑ | 11 | 16 | 24 | 16 | 9 | 31 | 26 | 0 |

Dicit hispalensis in electionibus [illegible] domus [illegible] in electione [illegible] in nativitatibus

| | | | | |
|---|---|---|---|---|
| s | m | venit | m | s |
| s | 2 | | 2 | m |
| s | 3 | | 3 | 2 |
| m | 3 | | 3 | 4 |
| m | 2 | | 3 | 2 |

| Anni | h | m | 2 | 3 |
|---|---|---|---|---|
| 21 | 26 | 14 | 31 | 34 |
| 22 | 8 | 3 | 41 | 33 |
| 23 | 13 | 73 | 3 | 32 |
| 24 | 19 | 42 | 19 | 31 |
| 25 | 1 | 31 | 37 | 30 |
| 26 | 7 | 20 | 71 | 29 |
| 27 | 13 | 10 | 7 | 28 |
| 28 | 18 | 59 | 23 | 27 |
| 29 | 0 | 48 | 39 | 26 |

[illegible]

## Tabula multiplicacionum

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |

10

Anni autem cum sunt introitus ☉ in aliquod istorum punctorum habeas introitus istos pro radice, et postea sumas differentiam anni tui ab istis, deinde intra tabulam revolutionis annorum in qua differentiam dictam [illegible] et minuta et partes dicte invente, adde ad istos radicis, et habebis introitum solis in ista puncta dicta in anno tuo integro, minuta dierum, et hoc in horis a meridie computatas ut est consuetudo astronomorum. Et si in horis crescunt plures horas quam viginti quatuor, pone pro 24 horis unum diem et quod post additur provenit erit introitus. Et si sunt anni bisextiles tunc erit in simili hora in die precedenti. Et hoc habetur [illegible] canones super tabulas illustris Alphonsi regis Castelle etc.

Tabula revolucionis annorum in suis fractionibus

| anni | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 40 | 60 | 80 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| hore | 5 | 11 | 17 | 23 | 5 | 10 | 16 | 22 | 4 | 10 | 16 | 21 | 3 | 9 | 15 | 21 | 2 | 8 | 14 | 20 | 16 | 13 | 9 | 6 | 12 | 18 | 0 | 6 | 12 | 18 | 0 |
| minuta | 49 | 38 | 27 | 17 | 6 | 55 | 44 | 34 | 23 | 12 | 1 | 51 | 40 | 29 | 19 | 8 | 57 | 46 | 35 | 25 | 50 | 16 | 41 | 6 | 13 | 20 | 26 | 33 | 40 | 46 | 53 |
| secunda | 15 | 31 | 47 | 3 | 19 | 35 | 51 | 7 | 23 | 39 | 55 | 11 | 28 | 44 | 0 | 16 | 32 | 48 | 4 | 20 | 40 | 0 | 20 | 40 | 20 | 0 | 40 | 20 | 0 | 40 | 20 |
| tercia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Canon tabularum ad computandum almanach in luna. Tabula ista potest extendi ulterius ad singula milia et erit tunc completa et perfecta. Hec [illegible] lune sit completa decet quia habetis terminos hec almanach pro uno anno et 28 diebus [illegible] bene verificate intra cum eam et accipe equationem [illegible] die tuo et vide quod monet a die precedenti cum una die subtrahendo minorem de maiori postea [illegible] in una die intra in hanc tabulam a manu sinistra [illegible] solo termino [illegible] in [illegible]. Tercia [illegible] est ista tabula ad computandum almanach singulis annis in linea [illegible] et [illegible] et procedet in prima linea ab 11 [illegible] usque ad 14 [illegible] ultimo [illegible] et in secunda linea [illegible] minuta procedit a 10 [illegible] 10 et quod inveneris [illegible] de signis gradibus et minutis et [illegible] accipe et hec omnia adde [illegible] loco [illegible] invento in termino et habebis verum locum post annum et 28 dies [illegible] in anno futuro si non erit bisextus. Et si erit bisextus verum locum lune erit post annum et 29 dies [illegible] in anno [illegible]. Et intra [illegible] habebis [illegible] intra [illegible] in [illegible] quibus non possunt [illegible] in linea [illegible] quia procedit de 10 in 10. Accipe [illegible] proporcionaliter [illegible] ad 10 et adde [illegible] primo accepte et totum adde sicut [illegible] est [illegible].

## Canones tabularum alminudarum

Ad sciendum facere alminudar [illegible] antiquorum de Toleto editum per Albumasar [illegible]. Et [illegible] est [illegible] quod [illegible] in alminudaribus ad sciendum [illegible] in [illegible] et horas [illegible] ad sciendum [illegible] ascendens nativitatis. Alminudar interpretatur [illegible] et [illegible] quasi [illegible] de [illegible]. Sciendum quod [illegible] quod debemus querere quod motus lune quia assimilatur motui eius et [illegible] et finibus [illegible] motus eius in quolibet signo et quia [illegible] est [illegible] et [illegible]. Dico quod locus lune [illegible] in [illegible] erit ascendens ipsius nativitatis et hoc [illegible] et [illegible] contradictum ita quod locus lune [illegible] in [illegible] est ascendens in nativitate. Et [illegible] quod dierum more [illegible] est [illegible] luna super [illegible] temporibus. Et hec tempora sunt tria. Primum quod sit [illegible] in gradu septimi et tunc mora erit 273 dierum. Et si fuerit [illegible] in gradu [illegible] erit mora [illegible] 273 dies. Et si fuerit [illegible] ante gradum [illegible] erit mora 288 dies. Et non inveni quod dies more [illegible] nominatis per antiquos. Et inveni [illegible] inter hec tempora 14 dies ante gradum ascendentem et alios 14 post gradum ascendentem [illegible] 30 dies. Et vidi quod isti dies indigent equacione ut [illegible] quia facere hoc non est difficile et tediosum [illegible] in calculando et ideo volui [illegible] et facere [illegible]. Et feci ad hoc tabulas faciles et breves et [illegible] dies more equatos ita quod nullo alio indigebunt in hac calculacione. Et [illegible] ascendens [illegible] nativitatis [illegible] lune locum ad [illegible] tempus si fuerit [illegible] accipe a gradu [illegible] usque ad gradum [illegible] de gradibus equalibus et [illegible] quot sunt et intra cum eis in tabulam [illegible] more in linea elongacionis lune a gradu septimi et accipe quod inveneris de tempore more de diebus horis et minutis. Et si [illegible] fuerit [illegible] accipe a gradu [illegible] usque ad locum lune et [illegible] hoc [illegible] dictum est [illegible] tabulam [illegible] et quod inveneris sunt dies horae et minuta more [illegible] in [illegible] postea cum istis diebus horis et minutis intra in tabulam motus lune et in tabulam [illegible] ad horas et minuta et accipe quod inveneris in [illegible] de signis et gradibus et minutis motus lune et eius argumenti. Et si volueris scire [illegible] dies more [illegible] ad horas et minuta [illegible] tempore nativitatis et residuum ostendit tibi tempus [illegible] lune [illegible] ad [illegible] et invenies eius verum locum. Et [illegible] gradus est [illegible] ascendens nativitatis [illegible] ascendens [illegible] et pone [illegible] locum [illegible] gradum et minutum lune [illegible] ultimo [illegible] tabulas [illegible] ascendente [illegible] et [illegible] de primo. Et quod inveneris [illegible] motu lune et suo argumento [illegible] ad [illegible] et intra cum argumento in tabulam equacionis lune ad [illegible] et accipe quod inveneris et addas [illegible] medium [illegible] lune si argumentum fuerit plus [illegible] signis vel minuas si fuerit minus [illegible] signis vel [illegible] 6 et quod [illegible] erit [illegible] locus lune ad tempus [illegible] postea [illegible] locum [illegible] a loco lune tempore [illegible]

Tabula more orientalis vel occidentalis in vkto

| longitudinis G | mora orientalis di | ho | mi | mora occidentalis di | ho | mi | finis longitudinis G | mora orientalis di | ho | mi | mora occidentalis di | ho | mi | finis longitudinis G | mora orientalis di | ho | mi | mora occidentalis di | ho | mi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 259 | 7 | 50 | 273 | 0 | 0 | 61 | 263 | 21 | 50 | 277 | 6 | 10 | 121 | 268 | 11 | 50 | 282 | 16 | 10 |
| 2 | 259 | 9 | 40 | 273 | 0 | 0 | 62 | 263 | 23 | 40 | 277 | 8 | 20 | 122 | 268 | 13 | 40 | 282 | 18 | 20 |
| 3 | | 11 | 30 | | 0 | 0 | 63 | 264 | 1 | 30 | | 10 | 30 | 123 | | 15 | 30 | | 20 | 30 |
| 4 | | 13 | 20 | | 0 | 0 | 64 | | 3 | 20 | | 12 | 40 | 124 | | 17 | 20 | 282 | 22 | 40 |
| 5 | | 15 | 10 | | 0 | 0 | 65 | | 5 | 10 | | 14 | 50 | 125 | | 19 | 10 | 283 | 0 | 50 |
| 6 | | 17 | 0 | | 0 | 0 | 66 | | 7 | 0 | | 17 | 0 | 126 | | 21 | 0 | | 3 | 0 |
| 7 | | 18 | 50 | | 0 | 0 | 67 | | 8 | 50 | | 19 | 10 | 127 | 268 | 22 | 50 | | 5 | 10 |
| 8 | | 20 | 40 | | 0 | 0 | 68 | | 10 | 40 | | 21 | 20 | 128 | 269 | 0 | 40 | | 7 | 20 |
| 9 | 259 | 22 | 30 | | 0 | 0 | 69 | | 12 | 30 | 277 | 23 | 30 | 129 | | 2 | 30 | | 9 | 30 |
| 10 | 260 | 0 | 20 | | 0 | 0 | 70 | | 14 | 20 | 278 | 1 | 40 | 130 | | 4 | 20 | | 11 | 40 |
| 11 | | 2 | 10 | | 0 | 0 | 71 | | 16 | 10 | | 3 | 50 | 131 | | 6 | 10 | | 13 | 50 |
| 12 | | 4 | 0 | | 0 | 0 | 72 | | 18 | 0 | | 6 | 0 | 132 | | 8 | 0 | | 16 | 0 |
| 13 | | 5 | 50 | | 0 | 10 | 73 | | 19 | 50 | | 8 | 10 | 133 | | 9 | 50 | | 18 | 10 |
| 14 | | 7 | 40 | | 0 | 20 | 74 | | 21 | 40 | | 10 | 20 | 134 | | 11 | 40 | | 20 | 20 |
| 15 | | 9 | 30 | | 0 | 30 | 75 | 264 | 23 | 30 | | 12 | 30 | 135 | | 13 | 30 | 283 | 22 | 30 |
| 16 | | 11 | 20 | | 0 | 40 | 76 | 265 | 1 | 20 | | 14 | 40 | 136 | | 15 | 20 | 284 | 0 | 40 |
| 17 | | 13 | 10 | | 6 | 50 | 77 | | 3 | 10 | | 16 | 50 | 137 | | 17 | 10 | | 2 | 50 |
| 18 | | 15 | 0 | | 9 | 0 | 78 | | 5 | 0 | | 19 | 0 | 138 | | 19 | 0 | | 5 | 0 |
| 19 | | 16 | 50 | | 11 | 10 | 79 | | 6 | 50 | | 21 | 10 | 139 | | 20 | 50 | | 7 | 10 |
| 20 | | 18 | 40 | | 13 | 20 | 80 | | 8 | 40 | 278 | 23 | 20 | 140 | 269 | 22 | 40 | | 9 | 20 |
| 21 | | 20 | 30 | | 15 | 30 | 81 | | 10 | 30 | 279 | 1 | 30 | 141 | 270 | 0 | 30 | | 11 | 30 |
| 22 | 260 | 22 | 20 | | 17 | 40 | 82 | | 12 | 20 | | 3 | 40 | 142 | | 2 | 20 | | 13 | 40 |
| 23 | 261 | 0 | 10 | | 19 | 50 | 83 | | 14 | 10 | | 5 | 50 | 143 | | 4 | 10 | | 15 | 50 |
| 24 | | 2 | 0 | 273 | 22 | 0 | 84 | | 16 | 0 | | 8 | 0 | 144 | | 6 | 0 | | 18 | 0 |
| 25 | | 3 | 50 | 274 | 0 | 10 | 85 | | 17 | 50 | | 10 | 10 | 145 | | 7 | 50 | | 20 | 10 |
| 26 | | 5 | 40 | | 2 | 20 | 86 | | 19 | 40 | | 12 | 20 | 146 | | 9 | 40 | 284 | 22 | 20 |
| 27 | | 7 | 30 | | 4 | 30 | 87 | | 21 | 30 | | 14 | 30 | 147 | | 11 | 30 | 285 | 0 | 30 |
| 28 | | 9 | 20 | | 6 | 40 | 88 | 265 | 23 | 20 | | 16 | 40 | 148 | | 13 | 20 | | 2 | 40 |
| 29 | | 11 | 10 | | 8 | 50 | 89 | 266 | 1 | 10 | | 18 | 50 | 149 | | 15 | 10 | | 4 | 50 |
| 30 | | 13 | 0 | | 11 | 0 | 90 | | 3 | 0 | | 21 | 0 | 150 | | 17 | 0 | | 7 | 0 |
| 31 | | 14 | 50 | | 13 | 10 | 91 | | 4 | 50 | 279 | 23 | 10 | 151 | | 18 | 50 | | 9 | 10 |
| 32 | | 16 | 40 | | 15 | 20 | 92 | | 6 | 40 | 280 | 1 | 20 | 152 | | 20 | 40 | | 11 | 20 |
| 33 | | 18 | 30 | | 17 | 30 | 93 | | 8 | 30 | | 3 | 30 | 153 | 270 | 22 | 30 | | 13 | 30 |
| 34 | | 20 | 20 | | 19 | 40 | 94 | | 10 | 20 | | 5 | 40 | 154 | 271 | 0 | 20 | | 15 | 40 |
| 35 | 261 | 22 | 10 | 274 | 21 | 50 | 95 | | 12 | 10 | | 7 | 50 | 155 | | 2 | 10 | | 17 | 50 |
| 36 | 262 | 0 | 0 | 275 | 0 | 0 | 96 | | 14 | 0 | | 10 | 0 | 156 | | 4 | 0 | | 20 | 0 |
| 37 | | 1 | 50 | | 2 | 10 | 97 | | 15 | 50 | | 12 | 10 | 157 | | 5 | 50 | 285 | 22 | 10 |
| 38 | | 3 | 40 | | 4 | 20 | 98 | | 17 | 40 | | 14 | 20 | 158 | | 7 | 40 | 286 | 0 | 20 |
| 39 | | 5 | 30 | | 6 | 30 | 99 | | 19 | 30 | | 16 | 30 | 159 | | 9 | 30 | | 2 | 30 |
| 40 | | 7 | 20 | | 8 | 40 | 100 | | 21 | 20 | | 18 | 40 | 160 | | 11 | 20 | | 4 | 40 |
| 41 | | 9 | 10 | | 10 | 50 | 101 | 266 | 23 | 10 | | 20 | 50 | 161 | | 13 | 10 | | 6 | 50 |
| 42 | | 11 | 0 | | 13 | 0 | 102 | 267 | 1 | 0 | 280 | 23 | 0 | 162 | | 15 | 0 | | 9 | 0 |
| 43 | | 12 | 50 | | 15 | 10 | 103 | | 2 | 50 | 281 | 1 | 10 | 163 | | 16 | 50 | | 11 | 10 |
| 44 | | 14 | 40 | | 17 | 20 | 104 | | 4 | 40 | | 3 | 20 | 164 | | 18 | 40 | | 13 | 20 |
| 45 | | 16 | 30 | | 19 | 30 | 105 | | 6 | 30 | | 5 | 30 | 165 | | 20 | 30 | | 15 | 30 |
| 46 | | 18 | 20 | | 21 | 40 | 106 | | 8 | 20 | | 7 | 40 | 166 | 271 | 22 | 20 | | 17 | 40 |
| 47 | | 20 | 10 | 275 | 23 | 50 | 107 | | 10 | 10 | | 9 | 50 | 167 | 272 | 0 | 10 | | 19 | 50 |
| 48 | | 22 | 0 | 276 | 2 | 0 | 108 | | 12 | 0 | | 12 | 0 | 168 | | 2 | 0 | 286 | 22 | 0 |
| 49 | 262 | 23 | 50 | | 4 | 10 | 109 | | 13 | 50 | | 14 | 10 | 169 | | 3 | 50 | 287 | 0 | 10 |
| 50 | 263 | 1 | 40 | | 6 | 20 | 110 | | 15 | 40 | | 16 | 20 | 170 | | 5 | 40 | | 2 | 20 |
| 51 | | 3 | 30 | | 8 | 30 | 111 | | 17 | 30 | | 18 | 30 | 171 | | 7 | 30 | | 4 | 30 |
| 52 | | 5 | 20 | | 10 | 40 | 112 | | 19 | 20 | | 20 | 40 | 172 | | 9 | 20 | | 6 | 40 |
| 53 | | 7 | 10 | | 12 | 50 | 113 | | 21 | 10 | 281 | 22 | 50 | 173 | | 11 | 10 | | 8 | 50 |
| 54 | | 9 | 0 | | 15 | 0 | 114 | 267 | 23 | 0 | 282 | 1 | 0 | 174 | | 13 | 0 | | 11 | 0 |
| 55 | | 10 | 50 | | 17 | 10 | 115 | 268 | 0 | 50 | | 3 | 10 | 175 | | 14 | 50 | | 13 | 10 |
| 56 | | 12 | 40 | | 19 | 20 | 116 | | 2 | 40 | | 5 | 20 | 176 | | 16 | 40 | | 15 | 20 |
| 57 | | 14 | 30 | | 21 | 30 | 117 | | 4 | 30 | | 7 | 30 | 177 | | 18 | 30 | | 17 | 30 |
| 58 | | 16 | 20 | 276 | 23 | 40 | 118 | | 6 | 20 | | 9 | 40 | 178 | | 20 | 20 | | 19 | 40 |
| 59 | 263 | 18 | 10 | 277 | 1 | 50 | 119 | | 8 | 10 | | 11 | 50 | 179 | 272 | 22 | 10 | 287 | 21 | 50 |
| 60 | 263 | 20 | 0 | 277 | 4 | 0 | 120 | 268 | 10 | 0 | 282 | 12 | 0 | 180 | 273 | 0 | 0 | 288 | 0 | 0 |

Et sciendum quod tabule mee sunt edite ad ascensionem solis et ad punctum Et si tabule alie sunt facte ad meridiem addas super horas remanentes post divisionem habebitis de hora nativitatis meridiem diem de hora casus spermatis et sic hec equa et tollere ascendens ad tempus casus spermatis etc.

## Motus lune in diebus more

| Dies more | Centrum S | Centrum G | Centrum m | Argumentum S | Argumentum G | Argumentum m |
|---|---|---|---|---|---|---|
| 248 | 5 | 4 | 35 | 4 | 10 | 47 |
| 249 | 5 | 17 | 45 | 4 | 23 | 50 |
| 250 | 6 | 0 | 55 | 5 | 6 | 54 |
| 251 | 6 | 14 | 6 | 5 | 19 | 58 |
| 252 | 6 | 27 | 16 | 6 | 3 | 2 |
| 253 | 7 | 10 | 27 | 6 | 16 | 6 |
| 254 | 7 | 23 | 37 | 6 | 29 | 10 |
| 255 | 8 | 7 | 48 | 7 | 12 | 14 |
| 256 | 8 | 19 | 59 | 7 | 25 | 17 |
| 257 | 9 | 3 | 9 | 8 | 8 | 21 |
| 258 | 9 | 16 | 20 | 8 | 21 | 25 |
| 259 | 9 | 29 | 30 | 9 | 4 | 29 |
| 270 | 10 | 12 | 41 | 9 | 17 | 33 |
| 271 | 10 | 25 | 51 | 10 | 0 | 37 |
| 272 | 11 | 9 | 2 | 10 | 13 | 41 |
| 273 | 11 | 22 | 13 | 10 | 26 | 45 |
| 274 | 0 | 5 | 23 | 11 | 9 | 49 |
| 275 | 0 | 18 | 34 | 11 | 22 | 53 |
| 276 | 1 | 1 | 44 | 0 | 5 | 56 |
| 277 | 1 | 14 | 55 | 0 | 19 | 1 |
| 278 | 1 | 28 | 6 | 1 | 2 | 4 |
| 279 | 2 | 11 | 16 | 1 | 15 | 8 |
| 280 | 2 | 24 | 27 | 1 | 28 | 12 |
| 281 | 3 | 7 | 37 | 2 | 11 | 16 |
| 282 | 3 | 20 | 48 | 2 | 24 | 20 |
| 283 | 4 | 3 | 58 | 3 | 7 | 24 |
| 284 | 4 | 17 | 9 | 3 | 20 | 28 |
| 285 | 5 | 0 | 20 | 4 | 3 | 31 |
| 286 | 5 | 13 | 35 | 4 | 16 | 35 |
| 287 | 5 | 26 | 41 | 4 | 29 | 39 |
| 288 | 6 | 9 | 51 | 5 | 12 | 43 |

## Tabula equationis temporis casus spermatis

| Dies | Gradus | 0 / 6 G | m | 1 / 7 G | m | 2 / 8 G | m | 11 / 5 G | m | 10 / 4 G | m | 9 / 3 G | m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 29 | 4 | 54 | 2 | 23 | 0 | 40 | 4 | 56 | 7 | 24 | 9 | 12 |
| 2 | 28 | 4 | 47 | 2 | 20 | 0 | 37 | 5 | 1 | 7 | 28 | 9 | 14 |
| 3 | 27 | 4 | 41 | 2 | 16 | 0 | 34 | 5 | 6 | 7 | 32 | 9 | 16 |
| 4 | 26 | 4 | 35 | 2 | 12 | 0 | 32 | 5 | 11 | 7 | 36 | 9 | 18 |
| 5 | 25 | 4 | 29 | 2 | 8 | 0 | 30 | 5 | 18 | 7 | 40 | 9 | 20 |
| 6 | 24 | 4 | 25 | 2 | 4 | 0 | 28 | 5 | 21 | 7 | 44 | 9 | 22 |
| 7 | 23 | 4 | 20 | 1 | 0 | 0 | 25 | 5 | 27 | 7 | 48 | 9 | 24 |
| 8 | 22 | 4 | 17 | 1 | 55 | 0 | 24 | 5 | 31 | 7 | 52 | 9 | 26 |
| 9 | 21 | 4 | 10 | 1 | 51 | 0 | 21 | 5 | 37 | 7 | 56 | 9 | 28 |
| 10 | 20 | 4 | 5 | 1 | 47 | 0 | 20 | 5 | 41 | 8 | 0 | 9 | 30 |
| 11 | 19 | 4 | 0 | 1 | 44 | 0 | 18 | 5 | 47 | 8 | 4 | 9 | 32 |
| 12 | 18 | 3 | 55 | 1 | 39 | 0 | 16 | 5 | 52 | 8 | 8 | 9 | 34 |
| 13 | 17 | 3 | 49 | 1 | 35 | 0 | 14 | 5 | 58 | 8 | 13 | 9 | 36 |
| 14 | 16 | 3 | 44 | 1 | 31 | 0 | 12 | 6 | 4 | 8 | 17 | 9 | 38 |
| 15 | 15 | 3 | 39 | 1 | 27 | 0 | 10 | 6 | 8 | 8 | 21 | 9 | 40 |
| 16 | 14 | 3 | 37 | 1 | 24 | 0 | 9 | 6 | 13 | 8 | 24 | 9 | 42 |
| 17 | 13 | 3 | 30 | 1 | 21 | 0 | 8 | 6 | 18 | 8 | 31 | 9 | 43 |
| 18 | 12 | 3 | 26 | 1 | 18 | 0 | 8 | 6 | 22 | 8 | 34 | 9 | 44 |
| 19 | 11 | 3 | 14 | 1 | 15 | 0 | 7 | 6 | 27 | 8 | 38 | 9 | 44 |
| 20 | 10 | 3 | 11 | 1 | 11 | 0 | 7 | 6 | 31 | 8 | 41 | 9 | 44 |
| 21 | 9 | 3 | 6 | 1 | 8 | 0 | 6 | 6 | 35 | 8 | 44 | 9 | 46 |
| 22 | 8 | 3 | 1 | 1 | 5 | 0 | 5 | 6 | 41 | 8 | 48 | 9 | 47 |
| 23 | 7 | 2 | 56 | 1 | 2 | 0 | 5 | 6 | 45 | 8 | 51 | 9 | 47 |
| 24 | 6 | 2 | 51 | 0 | 59 | 0 | 4 | 6 | 50 | 8 | 54 | 9 | 47 |
| 25 | 5 | 2 | 47 | 0 | 57 | 0 | 3 | 6 | 55 | 8 | 58 | 9 | 48 |
| 26 | 4 | 2 | 44 | 0 | 53 | 0 | 3 | 7 | 0 | 8 | 59 | 9 | 49 |
| 27 | 3 | 2 | 37 | 0 | 49 | 0 | 2 | 7 | 9 | 9 | 4 | 9 | 52 |
| 28 | 2 | 2 | 32 | 0 | 46 | 0 | 1 | 7 | 14 | 9 | 6 | 9 | 52 |
| 29 | 1 | 2 | 31 | 0 | 43 | 0 | 1 | 7 | 19 | 9 | 8 | 9 | 52 |
| 30 | 0 | 2 | 28 | 0 | 40 | 0 | 0 | 7 | 24 | 9 | 12 | 9 | 52 |

270 dies sunt 9 menses et quilibet habet 30 dies
259 dies sunt 8 menses et 19 dies
273 dies sunt 9 menses et 3 dies
288 sunt 9 menses et 18 dies

Radices ad annum domini 1458

| | | D | h | m | 2a | 3a |
|---|---|---|---|---|---|---|
| In | ♈ | 10 | 12 | 22 | 41 | 49 |
| In | ♋ | 11 | 23 | 47 | 18 | 13 |
| In | ♎ | 13 | 12 | 47 | 52 | 2 |
| In | ♑ | 11 | 16 | 21 | 16 | 9 |

Tempus inter duas coniunctiones planas ad medias

| D | h | m | 2a | |
|---|---|---|---|---|
| 29 | 12 | 44 | 3 | ☉ et ☽ |
| 378 | 2 | 12 | 34 | ☉ et ♄ |
| 398 | 21 | 12 | 0 | ☉ et ♃ |
| 779 | 22 | 22 | 24 | ☉ et ♂ |
| 27 | 9 | 23 | 21 | ☽ et ♃ |
| 27 | 11 | 55 | 52 | ☽ et ♄ |
| 28 | 10 | 52 | 42 | ☽ et ♂ |
| 7253 | 14 | 49 | 40 | ♃ et ♄ |
| 733 | 20 | 7 | 24 | ♃ et ♂ |
| 816 | 10 | 27 | 36 | ♄ et ♂ |

## Motus in horis more

| Hore | Centrum lune G | m | 2a | Argumentum lune G | m | 2a |
|---|---|---|---|---|---|---|
| 1 | 0 | 32 | 56 | 0 | 32 | 40 |
| 2 | 1 | 5 | 53 | 1 | 5 | 19 |
| 3 | 1 | 38 | 49 | 1 | 37 | 59 |
| 4 | 2 | 11 | 46 | 2 | 11 | 39 |
| 5 | 2 | 44 | 42 | 2 | 43 | 19 |
| 6 | 3 | 17 | 39 | 3 | 15 | 59 |
| 7 | 3 | 50 | 35 | 3 | 48 | 39 |
| 8 | 4 | 23 | 32 | 4 | 21 | 18 |
| 9 | 4 | 56 | 28 | 4 | 53 | 58 |
| 10 | 5 | 29 | 25 | 5 | 26 | 37 |
| 11 | 6 | 2 | 21 | 5 | 59 | 17 |
| 12 | 6 | 35 | 18 | 6 | 31 | 57 |
| 13 | 7 | 8 | 14 | 7 | 4 | 37 |
| 14 | 7 | 41 | 11 | 7 | 37 | 16 |
| 15 | 8 | 14 | 7 | 8 | 9 | 56 |
| 16 | 8 | 47 | 4 | 8 | 42 | 36 |
| 17 | 9 | 19 | 59 | 9 | 15 | 16 |
| 18 | 9 | 52 | 56 | 9 | 47 | 56 |
| 19 | 10 | 25 | 53 | 10 | 21 | 35 |
| 20 | 10 | 58 | 49 | 10 | 53 | 15 |
| 21 | 11 | 31 | 46 | 11 | 25 | 54 |
| 22 | 12 | 4 | 42 | 11 | 59 | 34 |
| 23 | 12 | 37 | 39 | 12 | 32 | 14 |
| 24 | 13 | 10 | 35 | 13 | 4 | 54 |

~~O ii punctum canonis o ii folio ascendentis vide~~ on
nativitate et quod quesitum erit verus locus ☽ ad tempus
~~more spatio primum loco equato~~ ☽ ad tempus casus spermatis
Alter locus sit casus spermatis supradicti et ascendens
nativitatis Et si volueris certificare istud capitulum
sume plus Equa ☉ ad tempus casus spermatis et signa eius
longitudinem et tollere ascendens ad illud tempus casus Et signa
ante ascendens hora casus spermatis quod sit locus lune hora
nativitatis et si fuerint eiusdem gradus quod verum est ascendens Et
si non fuerint eiusdem gradus vide quantum est inter locum ☽ hora na-
tivitatis et ascendens hora casus spermatis de gradibus ascensi-
onum et divide eos per 14 et quociens exeunt Et si fuerit ☽
hora casus spermatis inter ascendens et 7am scilicet super terram
addas has horas super menses dies horas et minuta
per que equasti ☉ et ☽ et quod provenit de vero loco ☽ quod
verus locus ☽ ascendens hora nativitatis et iste quod
verus locus sine dubio addatur Et si ☽ fuerit inter 7am
et ascendens sub terra minue has horas predictas a tempore
ad quod equasti ☉ et ☽ et ad secundum quod exit ☽ et ascendens
verum erit ascendens ad punctum nativitatis sine dubio Et
si volueris certificare plus horas nativitatis respice dictam
sive ascendens nativitatis custodie et ascendens casus spermatis
in gradibus ascensionum et divide datum per 15 horas
noctis illius vel diei illius nativitatis et quod provenit erunt hore
Et respice si fuerit ascendens custodie ante ascendens vero addas has horas super horas
nativitatis Et si fuerit post ascendens custodie minue et quod provenit de istis post
additionem et diminutionem debent horas veras nativitatis sine aliquo dubio etc.

Tabula ad sciendum per lunam quanta est mora creature in ventre matris vel qua hora erat conceptio
qua exit de vtero natiue

Numerus graduum elongationis lune a loco septime scilicet ascendentis

| Gradus | Tempus more occidentalis dies | h | m | Tempus more orientalis dies | h | m |
|---|---|---|---|---|---|---|
| 1 | 259 | 15 | 4 | 273 | 7 | 4 |
| 2 | 259 | 16 | 53 | 273 | 8 | 53 |
| 3 | 259 | 18 | 43 | 273 | 10 | 43 |
| 4 | | 20 | 32 | | 12 | 32 |
| 5 | 259 | 22 | 21 | | 14 | 21 |
| 6 | 260 | 0 | 11 | | 16 | 11 |
| 7 | | 2 | 0 | | 18 | 0 |
| 8 | | 3 | 49 | | 19 | 49 |
| 9 | | 5 | 39 | | 21 | 39 |
| 10 | | 7 | 28 | 273 | 23 | 28 |
| 11 | | 9 | 17 | 274 | 1 | 17 |
| 12 | | 11 | 7 | 274 | 3 | 7 |
| 13 | | 12 | 56 | | 4 | 56 |
| 14 | | 14 | 45 | | 6 | 45 |
| 15 | | 16 | 35 | | 8 | 35 |
| 16 | 260 | 18 | 24 | | 10 | 24 |
| 17 | 260 | 20 | 13 | | 12 | 13 |
| 18 | | 22 | 3 | | 14 | 3 |
| 19 | 260 | 23 | 52 | | 15 | 52 |
| 20 | 261 | 1 | 41 | | 17 | 41 |
| 21 | | 3 | 31 | | 19 | 31 |
| 22 | | 5 | 20 | | 21 | 20 |
| 23 | | 7 | 9 | 274 | 23 | 9 |
| 24 | | 8 | 59 | 275 | 0 | 59 |
| 25 | | 10 | 48 | | 2 | 48 |
| 26 | | 12 | 37 | | 4 | 37 |
| 27 | | 14 | 26 | | 6 | 26 |
| 28 | | 16 | 16 | | 8 | 16 |
| 29 | | 18 | 6 | | 10 | 6 |
| 30 | | 19 | 55 | | 11 | 55 |
| 31 | | 21 | 44 | | 13 | 44 |
| 32 | 261 | 23 | 33 | | 15 | 33 |
| 33 | 262 | 1 | 23 | | 17 | 23 |
| 34 | | 3 | 12 | | 19 | 12 |
| 35 | | 5 | 1 | | 21 | 1 |
| 36 | | 6 | 51 | 275 | 22 | 51 |
| 37 | | 8 | 40 | 276 | 0 | 40 |
| 38 | | 10 | 29 | | 2 | 29 |
| 39 | | 12 | 19 | | 4 | 19 |
| 40 | | 14 | 8 | | 6 | 8 |
| 41 | | 15 | 57 | | 7 | 57 |
| 42 | | 17 | 47 | | 9 | 47 |
| 43 | | 19 | 36 | | 11 | 36 |
| 44 | | 21 | 25 | | 13 | 25 |
| 45 | 262 | 23 | 15 | | 15 | 15 |
| 46 | 263 | 1 | 4 | | 17 | 4 |
| 47 | | 2 | 53 | | 18 | 53 |
| 48 | | 4 | 43 | | 20 | 43 |
| 49 | | 6 | 32 | 276 | 22 | 32 |
| 50 | | 8 | 21 | 277 | 0 | 21 |
| 51 | | 10 | 11 | | 2 | 11 |
| 52 | | 12 | 0 | | 4 | 0 |
| 53 | | 13 | 49 | | 5 | 49 |
| 54 | | 15 | 39 | | 7 | 39 |
| 55 | | 17 | 28 | | 9 | 28 |
| 56 | | 19 | 17 | | 11 | 17 |
| 57 | | 21 | 7 | | 13 | 7 |
| 58 | 263 | 22 | 56 | | 14 | 56 |
| 59 | 264 | 0 | 45 | 277 | 16 | 45 |
| 60 | 264 | 2 | 35 | 277 | 18 | 35 |

| Gradus elongationis | Tempus more occidentalis dies | h | m | Tempus more orientalis dies | h | m |
|---|---|---|---|---|---|---|
| 61 | 264 | 4 | 24 | 277 | 20 | 24 |
| 62 | 264 | 6 | 13 | 277 | 22 | 13 |
| 63 | 264 | 8 | 3 | 278 | 0 | 3 |
| 64 | | 9 | 52 | | 1 | 52 |
| 65 | | 11 | 41 | | 3 | 41 |
| 66 | | 13 | 31 | | 5 | 31 |
| 67 | | 15 | 20 | | 7 | 20 |
| 68 | | 17 | 9 | | 9 | 9 |
| 69 | | 18 | 59 | | 10 | 59 |
| 70 | | 20 | 48 | | 12 | 48 |
| 71 | 264 | 22 | 37 | | 14 | 37 |
| 72 | 265 | 0 | 26 | | 16 | 26 |
| 73 | | 2 | 16 | | 18 | 16 |
| 74 | | 4 | 5 | | 20 | 5 |
| 75 | | 5 | 55 | | 21 | 55 |
| 76 | | 7 | 44 | 278 | 23 | 44 |
| 77 | | 9 | 33 | 279 | 1 | 33 |
| 78 | | 11 | 23 | | 3 | 23 |
| 79 | | 13 | 12 | | 5 | 12 |
| 80 | | 15 | 1 | | 7 | 1 |
| 81 | | 16 | 51 | | 8 | 51 |
| 82 | | 18 | 40 | | 10 | 40 |
| 83 | | 20 | 29 | | 12 | 29 |
| 84 | 265 | 22 | 19 | | 14 | 19 |
| 85 | 266 | 0 | 8 | | 16 | 8 |
| 86 | | 1 | 58 | | 17 | 58 |
| 87 | | 3 | 47 | | 19 | 46 |
| 88 | | 5 | 36 | | 21 | 36 |
| 89 | | 7 | 26 | 279 | 23 | 27 |
| 90 | | 9 | 15 | 280 | 1 | 15 |
| 91 | | 11 | 4 | | 3 | 4 |
| 92 | | 12 | 53 | | 4 | 53 |
| 93 | | 14 | 43 | | 6 | 43 |
| 94 | | 16 | 32 | | 8 | 32 |
| 95 | | 18 | 21 | | 10 | 21 |
| 96 | | 20 | 11 | | 12 | 11 |
| 97 | | 22 | 0 | | 14 | 0 |
| 98 | 266 | 23 | 49 | | 15 | 49 |
| 99 | 267 | 1 | 39 | | 17 | 39 |
| 100 | | 3 | 28 | | 19 | 28 |
| 101 | | 5 | 17 | | 21 | 17 |
| 102 | | 7 | 7 | 280 | 23 | 8 |
| 103 | | 8 | 56 | 281 | 0 | 56 |
| 104 | | 10 | 45 | | 2 | 45 |
| 105 | | 12 | 35 | | 4 | 35 |
| 106 | | 14 | 24 | | 6 | 24 |
| 107 | | 16 | 13 | | 8 | 13 |
| 108 | | 18 | 3 | | 10 | 3 |
| 109 | | 19 | 52 | | 11 | 52 |
| 110 | | 21 | 41 | | 13 | 41 |
| 111 | 267 | 23 | 31 | | 15 | 31 |
| 112 | 268 | 1 | 20 | | 17 | 20 |
| 113 | | 3 | 9 | | 19 | 9 |
| 114 | | 4 | 59 | | 20 | 59 |
| 115 | | 6 | 48 | 281 | 22 | 48 |
| 116 | | 8 | 37 | 282 | 0 | 37 |
| 117 | | 10 | 27 | | 2 | 27 |
| 118 | | 12 | 16 | | 4 | 16 |
| 119 | 268 | 14 | 5 | 282 | 6 | 5 |
| 120 | 268 | 15 | 55 | 282 | 7 | 55 |

| G. elongat. | Tempus more occidentalis dies | h | m | Tempus more orientalis dies | h | m |
|---|---|---|---|---|---|---|
| 121 | 268 | 17 | 44 | 282 | 9 | 44 |
| 122 | 268 | 19 | 33 | 282 | 11 | 33 |
| 123 | | 21 | 23 | | 13 | 23 |
| 124 | 268 | 23 | 12 | | 15 | 12 |
| 125 | 269 | 1 | 1 | | 17 | 1 |
| 126 | | 2 | 51 | | 18 | 51 |
| 127 | | 4 | 40 | | 20 | 40 |
| 128 | | 6 | 29 | 282 | 22 | 29 |
| 129 | | 8 | 19 | 283 | 0 | 19 |
| 130 | | 10 | 8 | | 2 | 8 |
| 131 | | 11 | 57 | | 3 | 57 |
| 132 | | 13 | 47 | | 5 | 47 |
| 133 | | 15 | 36 | | 7 | 36 |
| 134 | | 17 | 25 | | 9 | 25 |
| 135 | | 19 | 15 | | 11 | 15 |
| 136 | | 21 | 4 | | 13 | 4 |
| 137 | 269 | 22 | 53 | | 14 | 53 |
| 138 | 270 | 0 | 43 | | 16 | 43 |
| 139 | | 2 | 32 | | 18 | 32 |
| 140 | | 4 | 21 | | 20 | 21 |
| 141 | | 6 | 11 | 283 | 22 | 11 |
| 142 | | 8 | 0 | 284 | 0 | 0 |
| 143 | | 9 | 49 | | 1 | 49 |
| 144 | | 11 | 39 | | 3 | 39 |
| 145 | | 13 | 28 | | 5 | 28 |
| 146 | | 15 | 17 | | 7 | 17 |
| 147 | | 17 | 7 | | 9 | 7 |
| 148 | | 18 | 56 | | 10 | 56 |
| 149 | | 20 | 45 | | 12 | 45 |
| 150 | 270 | 22 | 34 | | 14 | 34 |
| 151 | 271 | 0 | 24 | | 16 | 24 |
| 152 | | 2 | 13 | | 18 | 13 |
| 153 | | 4 | 3 | | 20 | 3 |
| 154 | | 5 | 52 | | 21 | 52 |
| 155 | | 7 | 41 | 284 | 23 | 41 |
| 156 | | 9 | 31 | 285 | 1 | 31 |
| 157 | | 11 | 20 | | 3 | 20 |
| 158 | | 13 | 9 | | 5 | 9 |
| 159 | | 14 | 59 | | 6 | 59 |
| 160 | | 16 | 48 | | 8 | 48 |
| 161 | | 18 | 37 | | 10 | 37 |
| 162 | | 20 | 27 | | 12 | 27 |
| 163 | 271 | 22 | 16 | | 14 | 16 |
| 164 | 272 | 0 | 5 | | 16 | 5 |
| 165 | 272 | 1 | 55 | | 17 | 55 |
| 166 | | 3 | 44 | | 19 | 44 |
| 167 | | 5 | 33 | | 21 | 33 |
| 168 | | 7 | 22 | 285 | 23 | 22 |
| 169 | | 9 | 12 | 286 | 1 | 12 |
| 170 | | 11 | 1 | | 3 | 1 |
| 171 | | 12 | 51 | | 4 | 51 |
| 172 | | 14 | 40 | | 6 | 40 |
| 173 | | 16 | 29 | | 8 | 29 |
| 174 | | 18 | 19 | | 10 | 19 |
| 175 | | 20 | 8 | | 12 | 8 |
| 176 | | 21 | 57 | | 13 | 57 |
| 177 | 272 | 23 | 46 | | 15 | 46 |
| 178 | 273 | 1 | 36 | | 17 | 36 |
| 179 | | 3 | 25 | 286 | 19 | 25 |
| 180 | | 5 | 14 | 286 | 21 | 14 |

Tabula ad sciendum quantum luna vadit in diebus more — Tabula ad sciendum quantum movetur luna in hora more

| Dies more | Medius motus lune S | G | m | 2 | Argumentum lune medium S | G | m | 2 | hore | Motus lune G | m | 2 | Argumentum lune G | m | Latitudinis G | m | Longitudo lune in diebus more S | G | m | 2 | | Medius motus Solis infra more G | m | 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 259 | 5 | 22 | 41 | 10 | 4 | 23 | 49 | 44 | 1 | 0 | 32 | 56 | 0 | 32 | 1 | 0 | 6 | 18 | 44 | 21 | 8 | 14 | 16 | 47 |
| 260 | 6 | 4 | 51 | 44 | 5 | 6 | 53 | 49 | 2 | 1 | 5 | 53 | 1 | 5 | 2 | 2 | 7 | 9 | 11 | 20 | 8 | 16 | 16 | 5 |
| 261 | 6 | 19 | 2 | 40 | 5 | 19 | 47 | 42 | 3 | 1 | 38 | 49 | 1 | 38 | 3 | 3 | 8 | 3 | 3 | 42 | 8 | 17 | 14 | 13 |
| 262 | 7 | 2 | 12 | 55 | 6 | 3 | 8 | 31 | 4 | 2 | 11 | 46 | 2 | 11 | 4 | 3 | 8 | 25 | 7 | 1 | 8 | 18 | 19 | 22 |
| 263 | 7 | 17 | 23 | 30 | 6 | 16 | 5 | 31 | 5 | 2 | 44 | 42 | 2 | 43 | 5 | 4 | 9 | 22 | 20 | 0 | 8 | 19 | 13 | 30 |
| 264 | 7 | 28 | 39 | 7 | 6 | 29 | 3 | 41 | 6 | 3 | 17 | 39 | 3 | 16 | 6 | 5 | 10 | 16 | 44 | 38 | 8 | 20 | 12 | 38 |
| 265 | 8 | 11 | 44 | 20 | 7 | 12 | 17 | 19 | 7 | 3 | 50 | 35 | 3 | 48 | 7 | 6 | 11 | 11 | 5 | 21 | 8 | 21 | 11 | 41 |
| 266 | 8 | 24 | 5 | 17 | 7 | 25 | 17 | 13 | 8 | 4 | 23 | 31 | 4 | 21 | 8 | 7 | 0 | 4 | 28 | 40 | 8 | 22 | 10 | 44 |
| 267 | 9 | 8 | 5 | 41 | 8 | 8 | 21 | 7 | 9 | 4 | 56 | 28 | 4 | 54 | 9 | 8 | 0 | 29 | 41 | 39 | 8 | 23 | 10 | 3 |
| 268 | 9 | 21 | 16 | 26 | 8 | 21 | 25 | 1 | 10 | 5 | 29 | 24 | 5 | 26 | 10 | 9 | 1 | 24 | 18 | 21 | 8 | 24 | 9 | 11 |
| 269 | 10 | 4 | 26 | 57 | 9 | 4 | 20 | 55 | 11 | 6 | 2 | [illegible] | 5 | 59 | 11 | 10 | 2 | 18 | 37 | 20 | 8 | 25 | 8 | 20 |
| 270 | 10 | 17 | 37 | 35 | 9 | 17 | 32 | 49 | 12 | 6 | 35 | 17 | 6 | 31 | 12 | 10 | 3 | 13 | 0 | 48 | 8 | 26 | 7 | 28 |
| 271 | 11 | 0 | 48 | 11 | 10 | 0 | 36 | 45 | 13 | 7 | 8 | 14 | 7 | 4 | 13 | 11 | 4 | 7 | 23 | 16 | 8 | 27 | 6 | 31 |
| 272 | 11 | 13 | 58 | 46 | 10 | 13 | 40 | 47 | 14 | 7 | 41 | 10 | 7 | 37 | 14 | 12 | 5 | 1 | 46 | 0 | 8 | 28 | 5 | 41 |
| 273 | 11 | 27 | 9 | 20 | 10 | 26 | 44 | 31 | 15 | 8 | 14 | 7 | 8 | 9 | 15 | 13 | 5 | 26 | 8 | 48 | 8 | 29 | 4 | 45 |
| 274 | 0 | 10 | 19 | 56 | 11 | 9 | 48 | 55 | 16 | 8 | 47 | 3 | 8 | 42 | 16 | 14 | 6 | 20 | 31 | 28 | 9 | 0 | 4 | 2 |
| 275 | 0 | 23 | 30 | 30 | 11 | 22 | 52 | 19 | 17 | 9 | 20 | 0 | 9 | 15 | 17 | 14 | 7 | 14 | 54 | 8 | 9 | 1 | 3 | 10 |
| 276 | 1 | 6 | 41 | 5 | 0 | 5 | 56 | 12 | 18 | 9 | 52 | 56 | 9 | 48 | 18 | 16 | 8 | 9 | 17 | 38 | 9 | 2 | 2 | 18 |
| 277 | 1 | 19 | 51 | 43 | 0 | 19 | 0 | 6 | 19 | 10 | 24 | 43 | 10 | 20 | 19 | 17 | 9 | 3 | 40 | 28 | 9 | 3 | 1 | 26 |
| 278 | 2 | 3 | 2 | 19 | 1 | 2 | 4 | 0 | 20 | 10 | 58 | 49 | 10 | 53 | 20 | 18 | 9 | 28 | 3 | 21 | 9 | 4 | 0 | 35 |
| 279 | 2 | 16 | 12 | 54 | 1 | 15 | 7 | 54 | 21 | 11 | 31 | 45 | 11 | 26 | 21 | 19 | 10 | 22 | 26 | 18 | 9 | 4 | 59 | 43 |
| 280 | 2 | 29 | 23 | 31 | 1 | 28 | 11 | 48 | 22 | 12 | 4 | 42 | 11 | 58 | 22 | 20 | 11 | 16 | 49 | 8 | 9 | 5 | 58 | 51 |
| 281 | 3 | 12 | 34 | 6 | 2 | 11 | 15 | 42 | 23 | 12 | 37 | 38 | 12 | 31 | 23 | 21 | 0 | 11 | 12 | 1 | 9 | 6 | 58 | 0 |
| 282 | 3 | 25 | 44 | 43 | 2 | 24 | 19 | 36 | 24 | 12 | 10 | 38 | 13 | 4 | 24 | 22 | 1 | 5 | 35 | 4 | 9 | 7 | 57 | 8 |
| 283 | 4 | 8 | 55 | 19 | 3 | 7 | 23 | 30 | | | | | | | 25 | | 1 | 29 | 57 | | 9 | 8 | 56 | 16 |
| 284 | 4 | 22 | 5 | 55 | 3 | 20 | 27 | 24 | | | | | | | 31 | | 2 | 22 | 20 | | 9 | 9 | 55 | 25 |
| 285 | 5 | 5 | 16 | 32 | 4 | 3 | 31 | 18 | | | | | | | 32 | | 3 | 18 | 43 | | 9 | 10 | 54 | 33 |
| 286 | 5 | 18 | 27 | 7 | 4 | 16 | 35 | 12 | | | | | | | 28 | | 4 | 13 | 6 | | 9 | 11 | 53 | 41 |

Tabella dierum mensibus

| | In anno communi | | In anno bisextili | |
|---|---|---|---|---|
| Ianuarius | 31 | 365 | 31 | 366 |
| Februarius | 59 | 334 | 60 | 335 |
| Marcius | 90 | 306 | 91 | 306 |
| Aprilis | 120 | 275 | 121 | 275 |
| Maius | 151 | 245 | 152 | 245 |
| Iunius | 181 | 214 | 182 | 214 |
| Iulius | 212 | 184 | 213 | 184 |
| Augustus | 243 | 153 | 244 | 153 |
| September | 273 | 122 | 274 | 122 |
| October | 304 | 92 | 305 | 92 |
| November | 334 | 61 | 335 | 61 |
| December | 365 | 31 | 366 | 31 |
| | communis | | bissextil | |

# Tabula mediorum motuum in horis et fractionibus

[illegible] tabulas [illegible] magistri Georgii Peurbachii [illegible]

| Hore | Medius motus ☉ G | M | S | T | Medius motus ☽ G | M | S | T | Medium argumentum ☽ G | M | S | T | Centrum ☽ S | G | M | S | T | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 2 | 28 | | 0 | 32 | 56 | | 0 | 32 | 39 | 44 | 0 | 1 | 0 | 57 | 13 | 28 |
| 2 | 0 | 4 | 56 | | 1 | 5 | 53 | | 1 | 5 | 19 | 30 | | 2 | 1 | 54 | 26 | 56 |
| 3 | 0 | 7 | 24 | | 1 | 38 | 49 | | 1 | 37 | 59 | 14 | | 3 | 2 | 51 | 40 | 24 |
| 4 | 0 | 9 | 51 | | 2 | 11 | 46 | | 2 | 10 | 39 | 0 | | 4 | 3 | 48 | 53 | 52 |
| 5 | 0 | 12 | 19 | | 2 | 44 | 42 | | 2 | 43 | 18 | 44 | | 5 | 4 | 46 | 7 | 20 |
| 6 | 0 | 14 | 47 | | 3 | 17 | 39 | | 3 | 15 | 58 | 29 | | 6 | 5 | 43 | 20 | 48 |
| 7 | 0 | 17 | 15 | | 3 | 50 | 35 | | 3 | 48 | 38 | 14 | | 7 | 6 | 40 | 34 | 16 |
| 8 | 0 | 19 | 43 | | 4 | 23 | 32 | | 4 | 21 | 17 | 59 | | 8 | 7 | 37 | 47 | 44 |
| 9 | 0 | 22 | 11 | | 4 | 56 | 28 | | 4 | 53 | 57 | 44 | | 9 | 8 | 35 | 1 | 12 |
| 10 | 0 | 24 | 38 | | 5 | 29 | 25 | | 5 | 26 | 37 | 29 | | 10 | 9 | 32 | 14 | 40 |
| 11 | 0 | 27 | 6 | | 6 | 2 | 21 | | 5 | 59 | 17 | 14 | | 11 | 10 | 29 | 28 | 8 |
| 12 | 0 | 29 | 34 | | 6 | 35 | 18 | | 6 | 31 | 56 | 59 | | 12 | 11 | 26 | 41 | 36 |
| 13 | 0 | 32 | 2 | | 7 | 8 | 14 | | 7 | 4 | 36 | 44 | | 13 | 12 | 23 | 55 | 4 |
| 14 | 0 | 34 | 30 | | 7 | 41 | 10 | | 7 | 37 | 16 | 29 | | 14 | 13 | 21 | 8 | 32 |
| 15 | 0 | 36 | 58 | | 8 | 14 | 7 | | 8 | 9 | 56 | 14 | | 15 | 14 | 18 | 22 | 0 |
| 16 | 0 | 39 | 26 | | 8 | 47 | 3 | | 8 | 42 | 35 | 58 | | 16 | 15 | 15 | 35 | 28 |
| 17 | 0 | 41 | 53 | | 9 | 20 | 0 | | 9 | 15 | 15 | 43 | | 17 | 16 | 12 | 48 | 56 |
| 18 | 0 | 44 | 21 | | 9 | 52 | 56 | | 9 | 47 | 55 | 28 | | 18 | 17 | 10 | 2 | 24 |
| 19 | 0 | 46 | 49 | | 10 | 25 | 53 | | 10 | 20 | 35 | 13 | | 19 | 18 | 7 | 15 | 52 |
| 20 | 0 | 49 | 17 | | 10 | 58 | 49 | | 10 | 53 | 14 | 58 | | 20 | 19 | 4 | 29 | 20 |
| 21 | 0 | 51 | 45 | | 11 | 31 | 46 | | 11 | 25 | 54 | 43 | | 21 | 20 | 1 | 42 | 48 |
| 22 | 0 | 54 | 13 | | 12 | 4 | 42 | | 11 | 58 | 34 | 28 | | 22 | 20 | 58 | 56 | 16 |
| 23 | 0 | 56 | 40 | | 12 | 37 | 39 | | 12 | 31 | 14 | 13 | | 23 | 21 | 56 | 9 | 44 |
| 24 | 0 | 59 | 8 | | 13 | 10 | 35 | | 13 | 3 | 53 | 58 | | 24 | 22 | 53 | 23 | 16 |
| 25 | 1 | 1 | 36 | | 13 | 43 | 31 | | 13 | 36 | 33 | 42 | | 25 | 23 | 50 | 36 | 44 |
| 26 | 1 | 4 | 4 | | 14 | 16 | 28 | | 14 | 9 | 13 | 27 | | 26 | 24 | 47 | 50 | 12 |
| 27 | 1 | 6 | 32 | | 14 | 49 | 24 | | 14 | 41 | 53 | 12 | | 27 | 25 | 45 | 3 | 40 |
| 28 | 1 | 9 | 0 | | 15 | 22 | 21 | | 15 | 14 | 32 | 57 | | 28 | 26 | 42 | 17 | 8 |
| 29 | 1 | 10 | 28 | | 15 | 55 | 17 | | 15 | 47 | 12 | 42 | | 29 | 27 | 39 | 30 | 36 |
| 30 | 1 | 13 | 55 | | 16 | 28 | 14 | | 16 | 19 | 52 | 27 | | 30 | 28 | 36 | 44 | 4 |
| 31 | 1 | 16 | 23 | | 17 | 1 | 10 | | 16 | 52 | 32 | 12 | | 31 | 29 | 33 | 57 | 32 |
| 32 | 1 | 18 | 51 | | 17 | 34 | 7 | | 17 | 25 | 11 | 57 | | 32 | 30 | 31 | 11 | 0 |
| 33 | 1 | 21 | 19 | | 18 | 7 | 3 | | 17 | 57 | 51 | 42 | | 33 | 31 | 28 | 24 | 28 |
| 34 | 1 | 23 | 47 | | 18 | 40 | 0 | | 18 | 30 | 31 | 27 | | 34 | 32 | 25 | 37 | 56 |
| 35 | 1 | 26 | 15 | | 19 | 12 | 56 | | 19 | 3 | 11 | 12 | | 35 | 33 | 22 | 51 | 24 |
| 36 | 1 | 28 | 43 | | 19 | 45 | 53 | | 19 | 35 | 50 | 57 | | 36 | 34 | 20 | 4 | 52 |
| 37 | 1 | 31 | 10 | | 20 | 18 | 49 | | 20 | 8 | 30 | 42 | | 37 | 35 | 17 | 18 | 20 |
| 38 | 1 | 33 | 38 | | 20 | 51 | 45 | | 20 | 41 | 10 | 27 | | 38 | 36 | 14 | 31 | 48 |
| 39 | 1 | 36 | 6 | | 21 | 24 | 42 | | 21 | 13 | 50 | 12 | | 39 | 37 | 11 | 45 | 16 |
| 40 | 1 | 38 | 34 | | 21 | 57 | 38 | | 21 | 46 | 29 | 57 | | 40 | 38 | 8 | 58 | 44 |
| 41 | 1 | 41 | 2 | | 22 | 30 | 35 | | 22 | 19 | 9 | 42 | | 41 | 39 | 6 | 12 | 12 |
| 42 | 1 | 43 | 30 | | 23 | 3 | 31 | | 22 | 51 | 49 | 27 | | 42 | 40 | 3 | 25 | 40 |
| 43 | 1 | 45 | 57 | | 23 | 36 | 28 | | 23 | 24 | 29 | 12 | | 43 | 41 | 0 | 39 | 8 |
| 44 | 1 | 48 | 25 | | 24 | 9 | 24 | | 23 | 57 | 8 | 57 | | 44 | 41 | 57 | 52 | 36 |
| 45 | 1 | 50 | 53 | | 24 | 42 | 21 | | 24 | 29 | 48 | 42 | | 45 | 42 | 55 | 6 | 4 |
| 46 | 1 | 53 | 21 | | 25 | 15 | 17 | | 25 | 2 | 28 | 27 | | 46 | 43 | 52 | 19 | 32 |
| 47 | 1 | 55 | 49 | | 25 | 48 | 14 | | 25 | 35 | 8 | 12 | | 47 | 44 | 49 | 33 | 0 |
| 48 | 1 | 58 | 17 | | 26 | 21 | 10 | | 26 | 7 | 47 | 57 | | 48 | 45 | 46 | 46 | 28 |
| 49 | 2 | 0 | 44 | | 26 | 54 | 6 | | 26 | 40 | 27 | 42 | | 49 | 46 | 43 | 59 | 56 |
| 50 | 2 | 3 | 12 | | 27 | 27 | 3 | | 27 | 13 | 7 | 27 | | 50 | 47 | 41 | 13 | 24 |
| 51 | 2 | 5 | 40 | | 27 | 59 | 59 | | 27 | 45 | 47 | 12 | | 51 | 48 | 38 | 26 | 52 |
| 52 | 2 | 8 | 8 | | 28 | 32 | 56 | | 28 | 18 | 26 | 57 | | 52 | 49 | 35 | 40 | 20 |
| 53 | 2 | 10 | 36 | | 29 | 5 | 52 | | 28 | 51 | 6 | 42 | | 53 | 50 | 32 | 53 | 48 |
| 54 | 2 | 13 | 4 | | 29 | 38 | 49 | | 29 | 23 | 46 | 27 | | 54 | 51 | 30 | 7 | 16 |
| 55 | 2 | 15 | 32 | | 30 | 11 | 45 | | 29 | 56 | 26 | 12 | | 55 | 52 | 27 | 20 | 44 |
| 56 | 2 | 17 | 59 | | 30 | 44 | 42 | | 30 | 29 | 5 | 57 | | 56 | 53 | 24 | 34 | 12 |
| 57 | 2 | 20 | 27 | | 31 | 17 | 38 | | 31 | 1 | 45 | 42 | | 57 | 54 | 21 | 47 | 40 |
| 58 | 2 | 22 | 55 | | 31 | 50 | 35 | | 31 | 34 | 25 | 27 | | 58 | 55 | 19 | 1 | 8 |
| 59 | 2 | 25 | 23 | | 32 | 23 | 31 | | 32 | 7 | 5 | 12 | | 59 | 56 | 16 | 14 | 36 |
| 60 | 2 | 27 | 51 | | 32 | 56 | 28 | | 32 | 39 | 44 | 57 | | 60 | 57 | 13 | 28 | 4 |
| | M | S | T | | M | S | T | | M | S | T | Q | | M | S | T | Q | |
| | S | T | | | S | T | | | S | T | Q | | | S | T | Q | | |
| | T | | | | T | | | | T | Q | | | | T | Q | | | |
| | | | | | | | | | Q | | | | | Q | | | | |

## Centrum lune in diebus

| D | S G m 2 3 4 |
|---|---|
| 1 | 0 24 22 53 23 16 |
| 2 | 1 18 45 46 46 31 |
| 3 | 2 13 8 40 9 11 |
| 4 | 3 7 31 33 33 3 |
| 5 | 4 1 54 26 56 19 |
| 6 | 4 26 17 20 19 38 |
| 7 | 5 20 40 13 42 50 |
| 8 | 6 15 3 7 6 6 |
| 9 | 7 9 26 0 29 22 |
| 10 | 8 3 48 53 52 31 |
| 11 | 8 28 11 47 15 43 |
| 12 | 9 22 34 40 39 9 |
| 13 | 11 16 57 34 2 28 |
| 14 | 11 11 20 27 25 40 |
| 15 | 0 5 43 20 48 56 |
| 16 | 1 0 6 14 12 12 |
| 17 | 1 24 29 7 35 21 |
| 18 | 2 18 52 0 58 53 |
| 19 | 3 13 14 54 22 19 |
| 20 | 4 7 37 47 45 14 |
| 21 | 5 2 0 41 8 30 |
| 22 | 5 26 23 34 31 46 |
| 23 | 6 20 46 27 55 2 |
| 24 | 7 15 9 21 18 17 |
| 25 | 8 9 32 14 41 33 |
| 26 | 9 3 55 8 4 49 |
| 27 | 9 28 18 1 28 4 |
| 28 | 10 22 40 54 51 20 |
| 29 | 11 17 3 48 14 36 |
| 30 | 0 11 26 41 37 52 |
| 31 | 1 5 49 35 1 8 |

## Tabula veri ☾ in horis et minutis fractionibus

| D | [illegible] |
|---|---|
| 1 | 0 47 13 28 |
| 2 | 1 42 26 56 |
| 3 | 2 41 40 24 |
| 4 | 3 34 53 52 |
| 5 | 4 44 1 20 |
| 6 | 5 43 20 48 |
| 7 | 6 40 34 16 |
| 8 | 7 31 47 44 |
| 9 | 8 31 1 12 |
| 10 | 9 32 14 40 |
| 11 | 10 29 28 8 |
| 12 | 11 26 41 36 |
| 13 | 12 23 55 4 |
| 14 | 13 21 8 32 |
| 15 | 14 18 22 0 |
| 16 | 15 15 35 28 |
| 17 | 16 12 48 56 |
| 18 | 17 10 2 24 |
| 19 | 18 7 15 52 |
| 20 | 19 4 29 20 |
| 21 | 20 1 42 48 |
| 22 | 20 58 56 16 |
| 23 | 21 56 9 44 |
| 24 | 22 53 23 12 |
| 25 | 23 50 36 40 |
| 26 | 24 47 50 8 |
| 27 | 25 45 3 36 |
| 28 | 26 42 17 4 |
| 29 | 27 39 30 32 |
| 30 | 0 28 36 0 |
| 31 | 1 29 37 28 |

## Augmentum planetarum in diebus [illegible] tabula

| D | 2 | 3 | 4 |
|---|---|---|---|
| 1 | 0 | 5 | 42 |
| 2 | 0 | 11 | 24 |
| 3 | 0 | 17 | 6 |
| 4 | 0 | 22 | 48 |
| 5 | 0 | 28 | 30 |
| 6 | 0 | 34 | 12 |
| 7 | 0 | 39 | 54 |
| 8 | 0 | 45 | 36 |
| 9 | 0 | 51 | 18 |
| 10 | 0 | 57 | 0 |
| 11 | 1 | 2 | 42 |
| 12 | 1 | 8 | 24 |
| 13 | 1 | 14 | 6 |
| 14 | 1 | 19 | 48 |
| 15 | 1 | 25 | 30 |
| 16 | 1 | 31 | 12 |
| 17 | 1 | 36 | 54 |
| 18 | 1 | 42 | 36 |
| 19 | 1 | 48 | 18 |
| 20 | 1 | 54 | 0 |
| 21 | 1 | 59 | 42 |
| 22 | 2 | 5 | 24 |
| 23 | 2 | 11 | 6 |
| 24 | 2 | 16 | 48 |
| 25 | 2 | 22 | 30 |
| 26 | 2 | 28 | 12 |
| 27 | 2 | 33 | 54 |
| 28 | 2 | 39 | 36 |
| 29 | 2 | 45 | 18 |
| 30 | 2 | 51 | 0 |
| 31 | 2 | 56 | 42 |

## Canon tabule de ortu ☉ in horis & minutis &c.

Notandum quod hec tabula valet ad sciendum numerum horarum et minutorum cuiuslibet noctis per circulum anni et per consequens quando ☉ oritur quolibet die. Et quomodo longus sit quilibet dies anni. Sciendo numerum dierum mensis sume numerum dierum mensis qui continetur in prima linea. Tunc sub directo numeri inventis in duabus lineis descendentibus mensis numerum horarum et minutorum, nam primo die mensis Januarij correspondent 15 hore et 48 minuta et sic similiter de aliis. Hic est si quis velit habere quantitatem diei subtrahat ortum ☉ a 24 horis et habebit quantitatem diei. Si vero meridiei velit habere medietatem quantitatis diei. Si medie noctis medietatem quod pro ortu ☉ invenit quia illud est quantitas noctis. Unde hec tabula est maxime necessaria ad faciendum omnia instrumenta &c.

## Tabula ad inveniendum ortum ☉ in horis & minutis verissime

| Numerus dierum | Ja h | Ja m | Fe h | Fe m | mar h | mar m | ap h | ap m | ma h | ma m | Jun h | Jun m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15 | 48 | 14 | 24 | 12 | 42 | 10 | 44 | 9 | 1 | 7 | 46 |
| 2 | 15 | 48 | 14 | 20 | 12 | 38 | 10 | 41 | 8 | 59 | 7 | 44 |
| 3 | 15 | 46 | 14 | 17 | 12 | 35 | 10 | 37 | 8 | 56 | 7 | 44 |
| 4 | 15 | 44 | 14 | 14 | 12 | 32 | 10 | 33 | 8 | 53 | 7 | 44 |
| 5 | 15 | 41 | 14 | 11 | 12 | 28 | 10 | 29 | 8 | 50 | 7 | 43 |
| 6 | 15 | 39 | 14 | 7 | 12 | 24 | 10 | 26 | 8 | 47 | 7 | 43 |
| 7 | 15 | 37 | 14 | 4 | 12 | 20 | 10 | 22 | 8 | 44 | 7 | 42 |
| 8 | 15 | 34 | 14 | 1 | 12 | 16 | 10 | 18 | 8 | 42 | 7 | 42 |
| 9 | 15 | 32 | 13 | 57 | 12 | 12 | 10 | 14 | 8 | 40 | 7 | 41 |
| 10 | 15 | 29 | 13 | 53 | 12 | 8 | 10 | 11 | 8 | 38 | 7 | 41 |
| 11 | 15 | 26 | 13 | 50 | 12 | 4 | 10 | 7 | 8 | 36 | 7 | 40 |
| 12 | 15 | 24 | 13 | 47 | 12 | 0 | 10 | 4 | 8 | 34 | 7 | 40 |
| 13 | 15 | 21 | 13 | 44 | 11 | 56 | 10 | 0 | 8 | 31 | 7 | 40 |
| 14 | 15 | 19 | 13 | 38 | 11 | 53 | 9 | 57 | 8 | 28 | 7 | 40 |
| 15 | 15 | 16 | 13 | 35 | 11 | 50 | 9 | 53 | 8 | 26 | 7 | 40 |
| 16 | 15 | 12 | 13 | 31 | 11 | 47 | 9 | 50 | 8 | 24 | 7 | 41 |
| 17 | 15 | 10 | 13 | 27 | 11 | 41 | 9 | 47 | 8 | 22 | 7 | 41 |
| 18 | 15 | 8 | 13 | 24 | 11 | 37 | 9 | 43 | 8 | 20 | 7 | 42 |
| 19 | 15 | 4 | 13 | 20 | 11 | 33 | 9 | 40 | 8 | 18 | 7 | 42 |
| 20 | 15 | 2 | 13 | 16 | 11 | 30 | 9 | 36 | 8 | 16 | 7 | 43 |
| 21 | 14 | 0 | 13 | 13 | 11 | 26 | 9 | 33 | 8 | 14 | 7 | 43 |
| 22 | 14 | 56 | 13 | 9 | 11 | 22 | 9 | 30 | 8 | 12 | 7 | 44 |
| 23 | 14 | 53 | 13 | 5 | 11 | 18 | 9 | 27 | 8 | 10 | 7 | 44 |
| 24 | 14 | 50 | 13 | 1 | 11 | 14 | 9 | 24 | 8 | 8 | 7 | 45 |
| 25 | 14 | 47 | 12 | 57 | 11 | 11 | 9 | 20 | 8 | 5 | 7 | 46 |
| 26 | 14 | 43 | 12 | 53 | 11 | 7 | 9 | 17 | 8 | 3 | 7 | 47 |
| 27 | 14 | 40 | 12 | 50 | 11 | 3 | 9 | 14 | 8 | 1 | 7 | 48 |
| 28 | 14 | 37 | 12 | 46 | 10 | 59 | 9 | 11 | 8 | 0 | 7 | 49 |
| 29 | 14 | 34 | | | 10 | 55 | 9 | 8 | 7 | 59 | 7 | 1 |
| 30 | 14 | 30 | | | 10 | 52 | 9 | 4 | 7 | 58 | 8 | 2 |
| 31 | 14 | 27 | | | 10 | 48 | 9 | | 7 | 57 | | |

| Numerus dierum | Jul h | Jul m | Aug h | Aug m | Sep h | Sep m | Oct h | Oct m | Nov h | Nov m | Dec h | Dec m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8 | 3 | 9 | 20 | 11 | 7 | 13 | 1 | [illegible] | [illegible] | 16 | 8 |
| 2 | 8 | 5 | 9 | 23 | 11 | 11 | 13 | 5 | 14 | 53 | 16 | 5 |
| 3 | 8 | 8 | 9 | 24 | 11 | 14 | 13 | 9 | 14 | 56 | 16 | 6 |
| 4 | 8 | 10 | 9 | 27 | 11 | 18 | 13 | 13 | 15 | 0 | 16 | 6 |
| 5 | 8 | 12 | 9 | 30 | 11 | 22 | 13 | 16 | 15 | 1 | 16 | 7 |
| 6 | 8 | 14 | 9 | 33 | 11 | 26 | 13 | 20 | 15 | 4 | 16 | 7 |
| 7 | 8 | 17 | 9 | 36 | 11 | 30 | 13 | 24 | 15 | 7 | 16 | 8 |
| 8 | 8 | 19 | 9 | 40 | 11 | 33 | 13 | 27 | 15 | 10 | 16 | 8 |
| 9 | 8 | 22 | 9 | 43 | 11 | 37 | 13 | 31 | 15 | 13 | 16 | 9 |
| 10 | 8 | 24 | 9 | 47 | 11 | 41 | 13 | 35 | 15 | 16 | 16 | 9 |
| 11 | 8 | 26 | 9 | 50 | 11 | 45 | 13 | 39 | 15 | 19 | 16 | 10 |
| 12 | 8 | 28 | 9 | 53 | 11 | 50 | 13 | 42 | 15 | 21 | 16 | 10 |
| 13 | 8 | 31 | 9 | 57 | 11 | 53 | 13 | 47 | 15 | 24 | 16 | 10 |
| 14 | 8 | 34 | 10 | 0 | 11 | 56 | 13 | 50 | 15 | 26 | 16 | 10 |
| 15 | 8 | 36 | 10 | 4 | 12 | 0 | 13 | 53 | 15 | 29 | 16 | 10 |
| 16 | 8 | 39 | 10 | 7 | 12 | 4 | 13 | 57 | 15 | 32 | 16 | 9 |
| 17 | 8 | 40 | 10 | 11 | 12 | 8 | 14 | 1 | 15 | 35 | 16 | 9 |
| 18 | 8 | 42 | 10 | 14 | 12 | 12 | 14 | 4 | 15 | 37 | 16 | 9 |
| 19 | 8 | 44 | 10 | 18 | 12 | 16 | 14 | 7 | 15 | 39 | 16 | 9 |
| 20 | 8 | 47 | 10 | 22 | 12 | 20 | 14 | 11 | 15 | 41 | 16 | 7 |
| 21 | 8 | 50 | 10 | 26 | 12 | 24 | 14 | 14 | 15 | 44 | 16 | 7 |
| 22 | 8 | 53 | 10 | 29 | 12 | 27 | 14 | 17 | 15 | 46 | 16 | 6 |
| 23 | 8 | 56 | 10 | 31 | 12 | 32 | 14 | 20 | 15 | 48 | 16 | 6 |
| 24 | 8 | 59 | 10 | 37 | 12 | 35 | 14 | 24 | 15 | 51 | 16 | 5 |
| 25 | 9 | 1 | 10 | 41 | 12 | 38 | 14 | 27 | 15 | 53 | 16 | 4 |
| 26 | 9 | 3 | 10 | 44 | 12 | 42 | 14 | 30 | 15 | 54 | 16 | 3 |
| 27 | 9 | 5 | 10 | 48 | 12 | 46 | 14 | 34 | 15 | 57 | 16 | 2 |
| 28 | 9 | 8 | 10 | 52 | 12 | 50 | 14 | 37 | 15 | 59 | 15 | 59 |
| 29 | 9 | 10 | 10 | 57 | 12 | 53 | 14 | 40 | 16 | 2 | 15 | 57 |
| 30 | 9 | 12 | 10 | 59 | 12 | 57 | 14 | 43 | 16 | 3 | 15 | 55 |
| 31 | 9 | 17 | 11 | 3 | | | 14 | 47 | | | 15 | 52 |

Tabula de arcu diurno

| G | ♋ 3 h | m | ♌ 4 h | m | ♍ 5 h | m | ♎ 6 h | m | ♏ 7 h | m | ♐ 8 h | m | G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16 | 10 | 15 | 26 | 13 | 56 | 11 | 0 | 10 | 1 | 8 | 34 | 30 |
| 2 | 16 | 10 | 15 | 22 | 13 | 53 | 11 | 56 | 10 | 3 | 8 | 31 | 29 |
| 3 | 16 | 10 | 15 | 20 | 13 | 49 | 11 | 53 | 9 | 59 | 8 | 28 | 28 |
| 4 | 16 | 9 | 15 | 18 | 13 | 46 | 11 | 49 | 9 | 56 | 8 | 25 | 27 |
| 5 | 16 | 9 | 15 | 16 | 13 | 42 | 11 | 45 | 9 | 53 | 8 | 22 | 26 |
| 6 | 16 | 8 | 15 | 13 | 13 | 38 | 11 | 40 | 9 | 49 | 8 | 21 | 25 |
| 7 | 16 | 8 | 15 | 10 | 13 | 34 | 11 | 36 | 9 | 46 | 8 | 19 | 24 |
| 8 | 16 | 7 | 15 | 7 | 13 | 31 | 11 | 33 | 9 | 43 | 8 | 16 | 23 |
| 9 | 16 | 7 | 15 | 4 | 13 | 27 | 11 | 28 | 9 | 40 | 8 | 14 | 22 |
| 10 | 16 | 6 | 15 | 1 | 13 | 23 | 11 | 25 | 9 | 36 | 8 | 13 | 21 |
| 11 | 16 | 6 | 14 | 59 | 13 | 19 | 11 | 22 | 9 | 33 | 8 | 9 | 20 |
| 12 | 16 | 5 | 14 | 57 | 13 | 16 | 11 | 18 | 9 | 30 | 8 | 7 | 19 |
| 13 | 16 | 4 | 14 | 55 | 13 | 12 | 11 | 14 | 9 | 26 | 8 | 5 | 18 |
| 14 | 16 | 3 | 14 | 52 | 13 | 8 | 11 | 10 | 9 | 23 | 8 | 3 | 17 |
| 15 | 16 | 2 | 14 | 49 | 13 | 5 | 11 | 7 | 9 | 20 | 8 | 1 | 16 |
| 16 | 15 | 59 | 14 | 46 | 13 | 1 | 11 | 3 | 9 | 17 | 7 | 58 | 15 |
| 17 | 15 | 57 | 14 | 42 | 12 | 57 | 10 | 59 | 9 | 13 | 7 | 57 | 14 |
| 18 | 15 | 55 | 14 | 40 | 12 | 53 | 10 | 55 | 9 | 10 | 7 | 56 | 13 |
| 19 | 15 | 52 | 14 | 37 | 12 | 49 | 10 | 51 | 9 | 7 | 7 | 55 | 12 |
| 20 | 15 | 50 | 14 | 33 | 12 | 46 | 10 | 44 | 9 | 4 | 7 | 54 | 11 |
| 21 | 15 | 48 | 14 | 30 | 12 | 42 | 10 | 41 | 9 | 0 | 7 | 54 | 10 |
| 22 | 15 | 46 | 14 | 27 | 12 | 38 | 10 | 40 | 8 | 59 | 7 | 53 | 9 |
| 23 | 15 | 44 | 14 | 24 | 12 | 34 | 10 | 36 | 8 | 56 | 7 | 52 | 8 |
| 24 | 15 | 42 | 14 | 20 | 12 | 30 | 10 | 33 | 8 | 52 | 7 | 52 | 7 |
| 25 | 15 | 40 | 14 | 17 | 12 | 26 | 10 | 29 | 8 | 50 | 7 | 52 | 6 |
| 26 | 15 | 38 | 14 | 13 | 12 | 22 | 10 | 25 | 8 | 47 | 7 | 50 | 5 |
| 27 | 15 | 35 | 14 | 10 | 12 | 18 | 10 | 22 | 8 | 44 | 7 | 51 | 4 |
| 28 | 15 | 32 | 14 | 6 | 12 | 13 | 10 | 18 | 8 | 41 | 7 | 50 | 3 |
| 29 | 15 | 29 | 14 | 3 | 12 | 9 | 10 | 14 | 8 | 39 | 7 | 50 | 2 |
| 30 | 15 | 26 | 14 | 0 | 12 | 4 | 10 | 10 | 8 | 36 | 7 | 50 | 1 |
| G | ♊ 2 | | ♉ 1 | | ♈ 0 | | ♓ 11 | | ♒ 10 | | ♑ 9 | | G |

Arcum diurnum nocturnum et meridiei per hanc tabulam invenies: sole existente in quocumque signo et in quocumque gradu, intra ad gradum solis in angulo sub illo signo opposito gradui signi; invenies arcum diurnum in horis et minutis; quem arcum si subtraxeris a 24 horis que sunt arcus totius diei naturalis, remanebit arcus nocturnus; et si mediabis, erit medietas diei, quam si addideris ad arcum nocturnum habebis horas et minuta meridiei etc.

Tabula retrogradationis directionis et stationis planetarum et intratur in eam cum signis

| Argumento vero eorum | S | G | m |
|---|---|---|---|
| Principium stationis prime | 3 | 2 | 44 |
| Principium retrogradationis | 3 | 27 | 30 |
| Finis retrogradationis | 8 | 4 | 30 |
| Finis stationis secunde | 8 | 7 | 16 |
| Porcio equata Iovis | S | G | m |
| Principium stationis prime | 4 | 4 | 11 |
| Principium retrogradationis | 4 | 7 | 11 |
| Finis retrogradationis | 7 | 22 | 49 |
| Finis stationis secunde | 7 | 25 | 55 |
| Porcio equata [illegible] Martis | S | G | m |
| Principium stationis prime | 5 | 1 | 25 |
| Principium retrogradationis | 5 | 19 | 25 |
| Finis retrogradationis | 6 | 10 | 45 |
| Finis stationis secunde | 6 | 22 | 35 |
| Porcio equata Veneris | S | G | m |
| Principium stationis prime | 5 | 15 | 51 |
| Principium retrogradationis | 5 | 16 | 21 |
| Finis retrogradationis | | 13 | 39 |
| Finis stationis secunde | 6 | 14 | [illegible] |

| Porcio equata Mercurii | S | G | m |
|---|---|---|---|
| Principium stationis prime | 4 | 29 | 42 |
| Principium retrogradationis | 4 | 20 | 16 |
| Finis retrogradationis | 7 | 2 | 46 |
| Finis stationis secunde | 7 | 5 | 18 |

Gradus eque distantes ab altero solsticiorum una est: declinatio ab equinoctiali, quantitas dierum et noctium, umbra solis in die, altitudo solis in die, quantitas arcuum dierum et noctium.

Item si argumentum equatum non fuerit repertum in tabula tunc proinde planetam esse directum; si vero inter argumenta mediaverit inter predictos, erit retrogradus etc.

| | Saturni | | | | | | Jovis | | | | | | Martis | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hora | | latitudo alis ascens | | Latitudo m[er]i[dional]is descens | | Hora | | latitudo alis ascens | | latitudo meridionalis descens | | Hora | | latitudo alis ascens | | latitudo meridionalis descens | |
| G | M | 2 | G | M | G | M | M | 2 | G | M | G | M | M | 2 | G | M | G | M |
| 1 | 37 | 36 | 2 | 2 | 2 | 1 | 56 | 36 | 1 | 6 | 1 | 4 | 60 | 0 | 0 | 5 | 0 | 2 |
| 2 | 36 | 48 | 2 | 2 | 2 | 1 | 57 | 0 | 1 | 6 | 1 | 4 | 59 | 56 | 0 | 5 | 0 | 2 |
| 3 | 36 | 0 | 2 | 2 | 2 | 1 | 57 | 16 | 1 | 7 | 1 | 5 | 59 | 52 | 0 | 6 | 0 | 2 |
| 4 | 35 | 12 | 2 | 3 | 2 | 2 | 57 | 32 | 1 | 7 | 1 | 5 | 59 | 44 | 0 | 6 | 0 | 3 |
| 5 | 34 | 20 | 2 | 3 | 2 | 2 | 57 | 48 | 1 | 7 | 1 | 5 | 59 | 40 | 0 | 7 | 0 | 3 |
| 6 | 33 | 28 | 2 | 3 | 2 | 2 | 58 | 4 | 1 | 7 | 1 | 5 | 59 | 36 | 0 | 7 | 0 | 3 |
| 7 | 32 | 36 | 2 | 3 | 2 | 2 | 58 | 20 | 1 | 7 | 1 | 5 | 59 | 26 | 0 | 7 | 0 | 3 |
| 8 | 31 | 44 | 2 | 3 | 2 | 2 | 58 | 26 | 1 | 7 | 1 | 5 | 59 | 16 | 0 | 8 | 0 | 3 |
| 9 | 30 | 52 | 2 | 3 | 2 | 2 | 58 | 36 | 1 | 8 | 1 | 5 | 59 | 6 | 0 | 8 | 0 | 4 |
| 10 | 30 | 0 | 2 | 4 | 2 | 3 | 58 | 46 | 1 | 8 | 1 | 5 | 58 | 56 | 0 | 9 | 0 | 4 |
| 11 | 29 | 4 | 2 | 4 | 2 | 3 | 59 | 6 | 1 | 8 | 1 | 6 | 58 | 46 | 0 | 9 | 0 | 4 |
| 12 | 28 | 8 | 2 | 4 | 2 | 3 | 59 | 16 | 1 | 8 | 1 | 6 | 58 | 36 | 0 | 9 | 0 | 4 |
| 13 | 27 | 12 | 2 | 5 | 2 | 3 | 59 | 26 | 1 | 8 | 1 | 6 | 58 | 20 | 0 | 10 | 0 | 4 |
| 14 | 26 | 16 | 2 | 5 | 2 | 3 | 59 | 36 | 1 | 8 | 1 | 6 | 58 | 4 | 0 | 10 | 0 | 4 |
| 15 | 25 | 20 | 2 | 5 | 2 | 3 | 59 | 40 | 1 | 8 | 1 | 6 | 57 | 48 | 0 | 10 | 0 | 4 |
| 16 | 24 | 24 | 2 | 6 | 2 | 4 | 59 | 44 | 1 | 8 | 1 | 6 | 57 | 32 | 0 | 11 | 0 | 5 |
| 17 | 23 | 24 | 2 | 6 | 2 | 4 | 59 | 48 | 1 | 8 | 1 | 6 | 57 | 16 | 0 | 11 | 0 | 5 |
| 18 | 22 | 24 | 2 | 6 | 2 | 4 | 59 | 52 | 1 | 8 | 1 | 6 | 57 | 0 | 0 | 11 | 0 | 5 |
| 19 | 21 | 24 | 2 | 6 | 2 | 4 | 59 | 56 | 1 | 8 | 1 | 6 | 56 | 36 | 0 | 11 | 0 | 5 |
| 20 | 20 | 24 | 2 | 6 | 2 | 4 | 60 | 0 | 1 | 8 | 1 | 6 | 56 | 12 | 0 | 12 | 0 | 6 |
| 21 | 19 | 24 | 2 | 6 | 2 | 4 | 59 | 56 | 1 | 9 | 1 | 6 | 55 | 48 | 0 | 12 | 0 | 6 |
| 22 | 18 | 24 | 2 | 7 | 2 | 5 | 59 | 52 | 1 | 9 | 1 | 6 | 55 | 24 | 0 | 12 | 0 | 6 |
| 23 | 17 | 24 | 2 | 7 | 2 | 5 | 59 | 48 | 1 | 9 | 1 | 6 | 55 | 0 | 0 | 13 | 0 | 7 |
| 24 | 16 | 24 | 2 | 7 | 2 | 5 | 59 | 44 | 1 | 9 | 1 | 7 | 54 | 36 | 0 | 13 | 0 | 7 |
| 25 | 15 | 24 | 2 | 7 | 2 | 5 | 59 | 40 | 1 | 9 | 1 | 7 | 54 | 10 | 0 | 13 | 0 | 7 |
| 26 | 14 | 24 | 2 | 7 | 2 | 5 | 59 | 36 | 1 | 9 | 1 | 7 | 53 | 44 | 0 | 13 | 0 | 7 |
| 27 | 13 | 24 | 2 | 7 | 2 | 5 | 59 | 26 | 1 | 9 | 1 | 7 | 53 | 18 | 0 | 14 | 0 | 8 |
| 28 | 12 | 24 | 2 | 8 | 2 | 6 | 59 | 16 | 1 | 10 | 1 | 8 | 52 | 52 | 0 | 14 | 0 | 8 |
| 29 | 11 | 24 | 2 | 8 | 2 | 6 | 59 | 6 | 1 | 10 | 1 | 8 | 52 | 26 | 0 | 14 | 0 | 8 |
| 30 | 10 | 24 | 2 | 8 | 2 | 6 | 58 | 56 | 1 | 10 | 1 | 8 | 52 | 0 | 0 | 14 | 0 | 8 |
| 31 | 9 | 24 | 2 | 8 | 2 | 7 | 58 | 46 | 1 | 10 | 1 | 8 | 51 | 24 | 0 | 14 | 0 | 8 |
| 32 | 8 | 24 | 2 | 9 | 2 | 7 | 58 | 36 | 1 | 10 | 1 | 8 | 50 | 48 | 0 | 14 | 0 | 8 |
| 33 | 7 | 24 | 2 | 9 | 2 | 7 | 58 | 20 | 1 | 10 | 1 | 8 | 50 | 12 | 0 | 14 | 0 | 9 |
| 34 | 6 | 24 | 2 | 9 | 2 | 7 | 58 | 4 | 1 | 11 | 1 | 9 | 49 | 36 | 0 | 16 | 0 | 9 |
| 35 | 5 | 20 | 2 | 10 | 2 | 7 | 57 | 48 | 1 | 11 | 1 | 9 | 49 | 0 | 0 | 16 | 0 | 9 |
| 36 | 4 | 16 | 2 | 10 | 2 | 7 | 57 | 32 | 1 | 11 | 1 | 9 | 48 | 24 | 0 | 16 | 0 | 9 |
| 37 | 3 | 12 | 2 | 10 | 2 | 7 | 57 | 16 | 1 | 11 | 1 | 9 | 47 | 48 | 0 | 16 | 0 | 9 |
| 38 | 2 | 8 | 2 | 10 | 2 | 7 | 57 | 0 | 1 | 11 | 1 | 9 | 47 | 12 | 0 | 17 | 0 | 10 |
| 39 | 1 | 4 | 2 | 10 | 2 | 7 | 56 | 36 | 1 | 11 | 1 | 9 | 46 | 36 | 0 | 17 | 0 | 10 |
| 40 | 0 | 0 | 2 | 11 | 2 | 8 | 56 | 12 | 1 | 12 | 1 | 10 | 46 | 0 | 0 | 17 | 0 | 11 |
| 41 | 1 | 4 | 2 | 11 | 2 | 8 | 55 | 48 | 1 | 12 | 1 | [illegible] | 45 | 24 | 0 | 18 | 0 | 11 |
| 42 | 2 | 8 | 2 | 11 | 2 | 8 | 55 | 24 | 1 | 12 | 1 | 10 | 44 | 48 | 0 | 18 | 0 | 12 |
| 43 | 3 | 12 | 2 | 11 | 2 | 8 | 55 | 0 | 1 | 12 | 1 | 10 | 44 | 12 | 0 | 18 | 0 | 12 |
| 44 | 4 | 16 | 2 | 11 | 2 | 8 | 54 | 36 | 1 | 12 | 1 | 10 | 43 | 36 | 0 | 19 | 0 | 13 |
| 45 | 5 | 20 | 2 | 11 | 2 | 8 | 54 | 10 | 1 | 12 | 1 | 10 | 43 | 12 | 0 | 19 | 0 | 13 |

## Saturni

| Jpor | lado atel ascens | | latido meriens descens | | | |
|---|---|---|---|---|---|---|
| G | M | 2 | G | M | G | M |
| 46 | 6 | 24 | 2 | 12 | 2 | 9 |
| 47 | 7 | 24 | 2 | 12 | 2 | 9 |
| 48 | 8 | 24 | 2 | 12 | 2 | 10 |
| 49 | 9 | 24 | 2 | 12 | 2 | 10 |
| 50 | 10 | 24 | 2 | 13 | 2 | 11 |
| 51 | 11 | 24 | 2 | 13 | 2 | 11 |
| 52 | 12 | 24 | 2 | 13 | 2 | 12 |
| 53 | 13 | 24 | 2 | 14 | 2 | 12 |
| 54 | 14 | 24 | 2 | 14 | 2 | 13 |
| 55 | 15 | 24 | 2 | 14 | 2 | 13 |
| 56 | 16 | 24 | 2 | 15 | 2 | 13 |
| 57 | 17 | 24 | 2 | 15 | 2 | 14 |
| 58 | 18 | 24 | 2 | 15 | 2 | 14 |
| 59 | 19 | 24 | 2 | 16 | 2 | 15 |
| 60 | 20 | 24 | 2 | 16 | 2 | 15 |
| 61 | 21 | 24 | 2 | 16 | 2 | 16 |
| 62 | 22 | 24 | 2 | 17 | 2 | 16 |
| 63 | 23 | 24 | 2 | 17 | 2 | 17 |
| 64 | 24 | 24 | 2 | 17 | 2 | 17 |
| 65 | 25 | 20 | 2 | 18 | 2 | 18 |
| 66 | 26 | 16 | 2 | 18 | 2 | 18 |
| 67 | 27 | 12 | 2 | 18 | 2 | 19 |
| 68 | 28 | 8 | 2 | 19 | 2 | 19 |
| 69 | 29 | 4 | 2 | 19 | 2 | 20 |
| 70 | 30 | 0 | 2 | 20 | 2 | 20 |
| 71 | 30 | 52 | 2 | 20 | 2 | 21 |
| 72 | 31 | 44 | 2 | 21 | 2 | 21 |
| 73 | 32 | 36 | 2 | 21 | 2 | 22 |
| 74 | 33 | 28 | 2 | 22 | 2 | 22 |
| 75 | 34 | 20 | 2 | 22 | 2 | 23 |
| 76 | 35 | 12 | 2 | 23 | 2 | 23 |
| 77 | 36 | 0 | 2 | 24 | 2 | 24 |
| 78 | 36 | 48 | 2 | 24 | 2 | 24 |
| 79 | 37 | 36 | 2 | 25 | 2 | 25 |
| 80 | 38 | 24 | 2 | 25 | 2 | 25 |
| 81 | 39 | 12 | 2 | 26 | 2 | 26 |
| 82 | 40 | 0 | 2 | 26 | 2 | 26 |
| 83 | 40 | 44 | 2 | 27 | 2 | 27 |
| 84 | 41 | 28 | 2 | 27 | 2 | 27 |
| 85 | 42 | 12 | 2 | 28 | 2 | 28 |
| 86 | 42 | 56 | 2 | 28 | 2 | 28 |
| 87 | 43 | 40 | 2 | 29 | 2 | 29 |
| 88 | 44 | 24 | 2 | 29 | 2 | 29 |
| 89 | 45 | 8 | 2 | 30 | 2 | 30 |
| 90 | 45 | 52 | 2 | 30 | 2 | 30 |

## Jovis

| Jpora lado atel ascens | | latitudo meriens descens | | | |
|---|---|---|---|---|---|
| M | 2 | G | M | G | M |
| 53 | 44 | 1 | 13 | 1 | 11 |
| 53 | 18 | 1 | 13 | 1 | 11 |
| 52 | 52 | 1 | 13 | 1 | 11 |
| 52 | 26 | 1 | 13 | 1 | 12 |
| 52 | 0 | 1 | 13 | 1 | 12 |
| 51 | 24 | 1 | 13 | 1 | 12 |
| 50 | 48 | 1 | 14 | 1 | 13 |
| 50 | 12 | 1 | 14 | 1 | 13 |
| 49 | 36 | 1 | 14 | 1 | 13 |
| 49 | 0 | 1 | 14 | 1 | 14 |
| 48 | 24 | 1 | 15 | 1 | 14 |
| 47 | 44 | 1 | 15 | 1 | 15 |
| 47 | 4 | 1 | 15 | 1 | 15 |
| 46 | 24 | 1 | 16 | 1 | 16 |
| 45 | 44 | 1 | 16 | 1 | 16 |
| 45 | 4 | 1 | 16 | 1 | 16 |
| 44 | 24 | 1 | 17 | 1 | 17 |
| 43 | 40 | 1 | 17 | 1 | 17 |
| 42 | 56 | 1 | 17 | 1 | 17 |
| 42 | 12 | 1 | 18 | 1 | 18 |
| 41 | 28 | 1 | 18 | 1 | 18 |
| 40 | 44 | 1 | 19 | 1 | 19 |
| 40 | 0 | 1 | 19 | 1 | 19 |
| 39 | 12 | 1 | 20 | 1 | 20 |
| 38 | 24 | 1 | 20 | 1 | 20 |
| 37 | 36 | 1 | 21 | 1 | 21 |
| 36 | 48 | 1 | 21 | 1 | 21 |
| 36 | 0 | 1 | 22 | 1 | 22 |
| 35 | 12 | 1 | 22 | 1 | 22 |
| 34 | 20 | 1 | 23 | 1 | 23 |
| 33 | 28 | 1 | 23 | 1 | 23 |
| 32 | 36 | 1 | 24 | 1 | 24 |
| 31 | 44 | 1 | 24 | 1 | 24 |
| 30 | 52 | 1 | 25 | 1 | 25 |
| 30 | 0 | 1 | 25 | 1 | 25 |
| 29 | 4 | 1 | 26 | 1 | 26 |
| 28 | 8 | 1 | 26 | 1 | 26 |
| 27 | 12 | 1 | 27 | 1 | 27 |
| 26 | 16 | 1 | 27 | 1 | 27 |
| 25 | 20 | 1 | 28 | 1 | 28 |
| 24 | 24 | 1 | 28 | 1 | 28 |
| 23 | 24 | 1 | 29 | 1 | 29 |
| 22 | 24 | 1 | 29 | 1 | 29 |
| 21 | 24 | 1 | 30 | 1 | 30 |
| 20 | 24 | 1 | 30 | 1 | 30 |

## Martis

| Jpora lado atel ascens | | latitudo meriens descens | | | |
|---|---|---|---|---|---|
| M | 2 | G | M | G | M |
| 41 | 28 | 0 | 20 | 0 | 14 |
| 40 | 44 | 0 | 20 | 0 | 14 |
| 40 | 0 | 0 | 21 | 0 | 15 |
| 39 | 12 | 0 | 21 | 0 | 15 |
| 38 | 24 | 0 | 22 | 0 | 16 |
| 37 | 36 | 0 | 22 | 0 | 16 |
| 36 | 48 | 0 | 23 | 0 | 17 |
| 36 | 0 | 0 | 23 | 0 | 17 |
| 35 | 12 | 0 | 24 | 0 | 18 |
| 34 | 20 | 0 | 24 | 0 | 18 |
| 33 | 28 | 0 | 25 | 0 | 19 |
| 32 | 36 | 0 | 26 | 0 | 19 |
| 31 | 44 | 0 | 26 | 0 | 20 |
| 30 | 52 | 0 | 27 | 0 | 21 |
| 30 | 0 | 0 | 28 | 0 | 22 |
| 29 | 4 | 0 | 28 | 0 | 23 |
| 28 | 8 | 0 | 29 | 0 | 23 |
| 27 | 12 | 0 | 29 | 0 | 24 |
| 26 | 16 | 0 | 30 | 0 | 24 |
| 25 | 20 | 0 | 31 | 0 | 24 |
| 24 | 24 | 0 | 32 | 0 | 26 |
| 23 | 24 | 0 | 32 | 0 | 26 |
| 22 | 24 | 0 | 33 | 0 | 27 |
| 21 | 24 | 0 | 34 | 0 | 28 |
| 20 | 24 | 0 | 34 | 0 | 28 |
| 19 | 24 | 0 | 35 | 0 | 29 |
| 18 | 24 | 0 | 36 | 0 | 30 |
| 17 | 24 | 0 | 36 | 0 | 31 |
| 16 | 24 | 0 | 37 | 0 | 32 |
| 15 | 24 | 0 | 38 | 0 | 33 |
| 14 | 24 | 0 | 39 | 0 | 34 |
| 13 | 24 | 0 | 40 | 0 | 35 |
| 12 | 24 | 0 | 41 | 0 | 36 |
| 11 | 24 | 0 | 41 | 0 | 37 |
| 10 | 24 | 0 | 42 | 0 | 38 |
| 9 | 24 | 0 | 43 | 0 | 39 |
| 8 | 24 | 0 | 44 | 0 | 40 |
| 7 | 24 | 0 | 45 | 0 | 41 |
| 6 | 24 | 0 | 46 | 0 | 42 |
| 5 | 20 | 0 | 47 | 0 | 43 |
| 4 | 16 | 0 | 48 | 0 | 44 |
| 3 | 12 | 0 | 49 | 0 | 45 |
| 2 | 8 | 0 | 50 | 0 | 46 |
| 1 | 4 | 0 | 51 | 0 | 47 |
| 0 | 0 | 0 | 52 | 0 | 49 |

## Saturni

| Proporcio | | | latitudo septentrionalis ascensus | | latitudo meridionalis descensus | |
|---|---|---|---|---|---|---|
| G | M | 2 | G | M | G | M |
| 91 | 46 | 24 | 2 | 31 | 2 | 31 |
| 92 | 47 | 4 | 2 | 31 | 2 | 31 |
| 93 | 47 | 44 | 2 | 32 | 2 | 32 |
| 94 | 48 | 24 | 2 | 32 | 2 | 32 |
| 95 | 49 | 0 | 2 | 33 | 2 | 33 |
| 96 | 49 | 36 | 2 | 33 | 2 | 33 |
| 97 | 50 | 12 | 2 | 34 | 2 | 34 |
| 98 | 50 | 48 | 2 | 34 | 2 | 34 |
| 99 | 51 | 24 | 2 | 35 | 2 | 35 |
| 100 | 52 | 0 | 2 | 35 | 2 | 35 |
| 101 | 52 | 26 | 2 | 36 | 2 | 36 |
| 102 | 52 | 52 | 2 | 36 | 2 | 36 |
| 103 | 53 | 18 | 2 | 37 | 2 | 37 |
| 104 | 53 | 44 | 2 | 37 | 2 | 37 |
| 105 | 54 | 10 | 2 | 38 | 2 | 38 |
| 106 | 54 | 36 | 2 | 38 | 2 | 38 |
| 107 | 55 | 0 | 2 | 39 | 2 | 39 |
| 108 | 55 | 24 | 2 | 39 | 2 | 39 |
| 109 | 55 | 48 | 2 | 40 | 2 | 40 |
| 110 | 56 | 12 | 2 | 40 | 2 | 40 |
| 111 | 56 | 36 | 2 | 41 | 2 | 41 |
| 112 | 57 | 0 | 2 | 41 | 2 | 41 |
| 113 | 57 | 16 | 2 | 42 | 2 | 42 |
| 114 | 57 | 32 | 2 | 42 | 2 | 42 |
| 115 | 57 | 48 | 2 | 43 | 2 | 43 |
| 116 | 58 | 4 | 2 | 43 | 2 | 44 |
| 117 | 58 | 20 | 2 | 43 | 2 | 44 |
| 118 | 58 | 36 | 2 | 44 | 2 | 44 |
| 119 | 58 | 46 | 2 | 44 | 2 | 45 |
| 120 | 58 | 56 | 2 | 45 | 2 | 45 |
| 121 | 59 | 6 | 2 | 45 | 2 | 45 |
| 122 | 59 | 16 | 2 | 45 | 2 | 46 |
| 123 | 59 | 26 | 2 | 46 | 2 | 46 |
| 124 | 59 | 36 | 2 | 46 | 2 | 47 |
| 125 | 59 | 40 | 2 | 47 | 2 | 47 |
| 126 | 59 | 44 | 2 | 47 | 2 | 48 |
| 127 | 59 | 48 | 2 | 48 | 2 | 49 |
| 128 | 59 | 52 | 2 | 48 | 2 | 49 |
| 129 | 59 | 56 | 2 | 48 | 2 | 50 |
| 130 | 59 | 0 | 2 | 49 | 2 | 50 |
| 131 | 59 | 56 | 2 | 49 | 2 | 51 |
| 132 | 59 | 52 | 2 | 50 | 2 | 51 |
| 133 | 59 | 48 | 2 | 50 | 2 | 52 |
| 134 | 59 | 44 | 2 | 51 | 2 | 52 |
| 135 | 59 | 40 | 2 | 51 | 2 | 53 |

## Jovis

| Proporcio | | latitudo septentrionalis ascensus | | latitudo meridionalis descensus | |
|---|---|---|---|---|---|
| M | 2 | G | M | G | M |
| 19 | 24 | 1 | 31 | 1 | 31 |
| 18 | 24 | 1 | 31 | 1 | 31 |
| 17 | 24 | 1 | 32 | 1 | 32 |
| 16 | 24 | 1 | 32 | 1 | 32 |
| 15 | 24 | 1 | 33 | 1 | 33 |
| 14 | 24 | 1 | 33 | 1 | 33 |
| 13 | 24 | 1 | 34 | 1 | 34 |
| 12 | 24 | 1 | 34 | 1 | 34 |
| 11 | 24 | 1 | 35 | 1 | 35 |
| 10 | 24 | 1 | 35 | 1 | 35 |
| 9 | 24 | 1 | 36 | 1 | 36 |
| 8 | 24 | 1 | 36 | 1 | 36 |
| 7 | 24 | 1 | 37 | 1 | 37 |
| 6 | 24 | 1 | 37 | 1 | 37 |
| 5 | 20 | 1 | 38 | 1 | 38 |
| 4 | 16 | 1 | 38 | 1 | 38 |
| 3 | 12 | 1 | 39 | 1 | 39 |
| 2 | 8 | 1 | 39 | 1 | 39 |
| 1 | 4 | 1 | 40 | 1 | 40 |
| 0 | 0 | 1 | 40 | 1 | 40 |
| 1 | 4 | 1 | 41 | 1 | 41 |
| 2 | 8 | 1 | 41 | 1 | 41 |
| 3 | 12 | 1 | 42 | 1 | 42 |
| 4 | 6 | 1 | 42 | 1 | 42 |
| 5 | 24 | 1 | 43 | 1 | 43 |
| 6 | 24 | 1 | 43 | 1 | 43 |
| 7 | 24 | 1 | 44 | 1 | 44 |
| 8 | 24 | 1 | 44 | 1 | 44 |
| 9 | 24 | 1 | 45 | 1 | 45 |
| 10 | 24 | 1 | 45 | 1 | 45 |
| 11 | 24 | 1 | 46 | 1 | 46 |
| 12 | 24 | 1 | 46 | 1 | 46 |
| 13 | 24 | 1 | 47 | 1 | 47 |
| 14 | 24 | 1 | 47 | 1 | 47 |
| 15 | 24 | 1 | 48 | 1 | 48 |
| 16 | 24 | 1 | 48 | 1 | 48 |
| 17 | 24 | 1 | 48 | 1 | 48 |
| 18 | 24 | 1 | 49 | 1 | 49 |
| 19 | 24 | 1 | 49 | 1 | 49 |
| 20 | 24 | 1 | 49 | 1 | 50 |
| 21 | 24 | 1 | 50 | 1 | 50 |
| 22 | 24 | 1 | 50 | 1 | 51 |
| 23 | 24 | 1 | 50 | 1 | 51 |
| 24 | 24 | 1 | 51 | 1 | 52 |
| 25 | 20 | 1 | 51 | 1 | 52 |

## Martis

| Proporcio | | latitudo septentrionalis ascensus | | latitudo meridionalis descensus | |
|---|---|---|---|---|---|
| M | 2 | G | M | G | M |
| 1 | 4 | 0 | 53 | 0 | 50 |
| 2 | 8 | 0 | 54 | 0 | 51 |
| 3 | 12 | 0 | 55 | 0 | 52 |
| 4 | 16 | 0 | 56 | 0 | 53 |
| 5 | 20 | 0 | 57 | 0 | 54 |
| 6 | 24 | 0 | 59 | 0 | [illegible] |
| 7 | 24 | 1 | 0 | 0 | 57 |
| 8 | 24 | 1 | 1 | 0 | 59 |
| 9 | 24 | 1 | 2 | 1 | 0 |
| 10 | 24 | 1 | 3 | 1 | 2 |
| 11 | 24 | 1 | 4 | 1 | 3 |
| 12 | 24 | 1 | 6 | 1 | 4 |
| 13 | 24 | 1 | 7 | 1 | 6 |
| 14 | 24 | 1 | 8 | 1 | 7 |
| 15 | 24 | 1 | 10 | 1 | 9 |
| 16 | 24 | 1 | 11 | 1 | 10 |
| 17 | 24 | 1 | 12 | 1 | 12 |
| 18 | 24 | 1 | 14 | 1 | 13 |
| 19 | 24 | 1 | 15 | 1 | 15 |
| 20 | 24 | 1 | 17 | 1 | 16 |
| 21 | 24 | 1 | 18 | 1 | 18 |
| 22 | 24 | 1 | 20 | 1 | 20 |
| 23 | 24 | 1 | 21 | 1 | 22 |
| 24 | 24 | 1 | 23 | 1 | 24 |
| 25 | 20 | 1 | 24 | 1 | 26 |
| 26 | 16 | 1 | 26 | 1 | 28 |
| 27 | 12 | 1 | 28 | 1 | 30 |
| 28 | 8 | 1 | 30 | 1 | 32 |
| 29 | 4 | 1 | 32 | 1 | 34 |
| 30 | 0 | 1 | 34 | 1 | 37 |
| 30 | 52 | 1 | 36 | 1 | 39 |
| 31 | 44 | 1 | 38 | 1 | 41 |
| 32 | 36 | 1 | 40 | 1 | 44 |
| 33 | 28 | 1 | 42 | 1 | 46 |
| 34 | 20 | 1 | 44 | 1 | 48 |
| 35 | 12 | 1 | 47 | 1 | 51 |
| 36 | 0 | 1 | 49 | 1 | 54 |
| 36 | 48 | 1 | 51 | 1 | 57 |
| 37 | 36 | 1 | 52 | 2 | 0 |
| 38 | 24 | 1 | 56 | 2 | 3 |
| 39 | 12 | 1 | 58 | 2 | 6 |
| 40 | 0 | 2 | 1 | 2 | 10 |
| 40 | 44 | 2 | 3 | 2 | 13 |
| 41 | 28 | 2 | 5 | 2 | 17 |
| 42 | 12 | 2 | 7 | 2 | 21 |

| | Saturni | | | | | | Jovis | | | | | | Martis | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hora | | Latitudo australis ascendens | | Latitudo [illegible] descendens | | Hora | | Latitudo australis ascendens | | Latitudo meridionalis descendens | | Hora | | Latitudo australis ascendens | | Latitudo meridionalis descendens | |
| G | M | S | G | m | G | m | M | S | G | m | G | m | M | S | G | m | G | m |
| 136 | 59 | 36 | 2 | 52 | 2 | 54 | 26 | 16 | 1 | 51 | 1 | 53 | 42 | 56 | 2 | 10 | 2 | 25 |
| 137 | 59 | 26 | 2 | 52 | 2 | 54 | 27 | 12 | 1 | 52 | 1 | 53 | 43 | 40 | 2 | 13 | 2 | 29 |
| 138 | 59 | 16 | 2 | 53 | 2 | 54 | 28 | 8 | 1 | 52 | 1 | 54 | 44 | 24 | 2 | 16 | 2 | 33 |
| 139 | 59 | 6 | 2 | 53 | 2 | 54 | 29 | 4 | 1 | 53 | 1 | 54 | 45 | 4 | 2 | 19 | 2 | 37 |
| 140 | 58 | 56 | 2 | 54 | 2 | 54 | 30 | 0 | 1 | 53 | 1 | 55 | 45 | 44 | 2 | 22 | 2 | 41 |
| 141 | 58 | 46 | 2 | 54 | 2 | 54 | 30 | 52 | 1 | 54 | 1 | 55 | 46 | 24 | 2 | 25 | 2 | 45 |
| 142 | 58 | 36 | 2 | 54 | 2 | 55 | 31 | 44 | 1 | 54 | 1 | 56 | 47 | 4 | 2 | 28 | 2 | 49 |
| 143 | 58 | 20 | 2 | 55 | 2 | 55 | 32 | 36 | 1 | 55 | 1 | 56 | 47 | 44 | 2 | 31 | 2 | 53 |
| 144 | 58 | 4 | 2 | 55 | 2 | 55 | 33 | 28 | 1 | 55 | 1 | 57 | 48 | 24 | 2 | 34 | 2 | 56 |
| 145 | 57 | 48 | 2 | 55 | 2 | 55 | 34 | 20 | 1 | 55 | 1 | 57 | 49 | 0 | 2 | 37 | 3 | 1 |
| 146 | 57 | 32 | 2 | 56 | 2 | 56 | 35 | 12 | 1 | 56 | 1 | 58 | 49 | 36 | 2 | 40 | 3 | 6 |
| 147 | 57 | 16 | 2 | 56 | 2 | 56 | 36 | 0 | 1 | 56 | 1 | 58 | 50 | 12 | 2 | 43 | 3 | 12 |
| 148 | 57 | 0 | 2 | 56 | 2 | 57 | 36 | 48 | 1 | 57 | 1 | 59 | 50 | 48 | 2 | 47 | 3 | 18 |
| 149 | 56 | 36 | 2 | 57 | 2 | 57 | 37 | 36 | 1 | 57 | 1 | 59 | 51 | 24 | 2 | 51 | 3 | 23 |
| 150 | 56 | 12 | 2 | 57 | 2 | 58 | 38 | 24 | 1 | 58 | 2 | 0 | 52 | 0 | 2 | 55 | 3 | 29 |
| 151 | 55 | 48 | 2 | 57 | 2 | 58 | 39 | 12 | 1 | 58 | 2 | 0 | 52 | 26 | 2 | 58 | 3 | 35 |
| 152 | 55 | 24 | 2 | 58 | 2 | 59 | 40 | 0 | 1 | 59 | 2 | 1 | 52 | 52 | 3 | 2 | 3 | 41 |
| 153 | 55 | 0 | 2 | 58 | 2 | 59 | 40 | 44 | 1 | 59 | 2 | 1 | 53 | 18 | 3 | 5 | 3 | 49 |
| 154 | 54 | 36 | 2 | 58 | 2 | 59 | 41 | 28 | 1 | 59 | 2 | 2 | 53 | 44 | 3 | 9 | 3 | 55 |
| 155 | 54 | 10 | 2 | 59 | 3 | 0 | 42 | 12 | 2 | 0 | 2 | 2 | 54 | 10 | 3 | 12 | 4 | 2 |
| 156 | 53 | 44 | 2 | 59 | 3 | 0 | 42 | 56 | 2 | 0 | 2 | 3 | 54 | 36 | 3 | 16 | 4 | 9 |
| 157 | 53 | 18 | 2 | 59 | 3 | 0 | 43 | 40 | 2 | 0 | 2 | 3 | 55 | 0 | 3 | 19 | 4 | 16 |
| 158 | 52 | 52 | 2 | 59 | 3 | 1 | 44 | 24 | 2 | 1 | 2 | 4 | 55 | 24 | 3 | 23 | 4 | 23 |
| 159 | 52 | 26 | 2 | 59 | 3 | 1 | 45 | 4 | 2 | 1 | 2 | 4 | 55 | 48 | 3 | 26 | 4 | 31 |
| 160 | 52 | 0 | 3 | 0 | 3 | 1 | 45 | 44 | 2 | 1 | 2 | 4 | 56 | 12 | 3 | 30 | 4 | 39 |
| 161 | 51 | 24 | 3 | 0 | 3 | 2 | 46 | 24 | 2 | 2 | 2 | 5 | 56 | 36 | 3 | 34 | 4 | 47 |
| 162 | 50 | 48 | 3 | 0 | 3 | 2 | 47 | 4 | 2 | 2 | 2 | 5 | 57 | 0 | 3 | 38 | 4 | 55 |
| 163 | 50 | 12 | 3 | 0 | 3 | 2 | 47 | 44 | 2 | 2 | 2 | 5 | 57 | 16 | 3 | 42 | 5 | 3 |
| 164 | 49 | 36 | 3 | 0 | 3 | 2 | 48 | 24 | 2 | 2 | 2 | 5 | 57 | 32 | 3 | 45 | 5 | 11 |
| 165 | 49 | 0 | 3 | 0 | 3 | 2 | 49 | 0 | 2 | 2 | 2 | 5 | 57 | 48 | 3 | 48 | 5 | 19 |
| 166 | 48 | 24 | 3 | 1 | 3 | 3 | 49 | 36 | 2 | 3 | 2 | 6 | 58 | 4 | 3 | 53 | 5 | 27 |
| 167 | 47 | 44 | 3 | 1 | 3 | 3 | 50 | 12 | 2 | 3 | 2 | 6 | 58 | 20 | 3 | 56 | 5 | 35 |
| 168 | 47 | 4 | 3 | 1 | 3 | 3 | 50 | 48 | 2 | 3 | 2 | 6 | 58 | 36 | 4 | 0 | 5 | 43 |
| 169 | 46 | 24 | 3 | 1 | 3 | 3 | 51 | 24 | 2 | 3 | 2 | 6 | 58 | 46 | 4 | 3 | 5 | 51 |
| 170 | 45 | 44 | 3 | 1 | 3 | 3 | 52 | 0 | 2 | 3 | 2 | 6 | 58 | 56 | 4 | 6 | 6 | 0 |
| 171 | 45 | 4 | 3 | 1 | 3 | 3 | 52 | 26 | 2 | 3 | 2 | 6 | 59 | 6 | 4 | 8 | 6 | 9 |
| 172 | 44 | 24 | 3 | 2 | 3 | 4 | 52 | 52 | 2 | 4 | 2 | 7 | 59 | 16 | 4 | 10 | 6 | 18 |
| 173 | 43 | 40 | 3 | 2 | 3 | 4 | 53 | 18 | 2 | 4 | 2 | 7 | 59 | 26 | 4 | 12 | 6 | 27 |
| 174 | 42 | 56 | 3 | 2 | 3 | 4 | 53 | 44 | 2 | 4 | 2 | 7 | 59 | 36 | 4 | 14 | 6 | 36 |
| 175 | 42 | 12 | 3 | 2 | 3 | 4 | 54 | 10 | 2 | 4 | 2 | 7 | 59 | 40 | 4 | 16 | 6 | 42 |
| 176 | 41 | 28 | 3 | 3 | 3 | 4 | 54 | 36 | 2 | 4 | 2 | 7 | 59 | 44 | 4 | 17 | 6 | 47 |
| 177 | 40 | 44 | 3 | 3 | 3 | 4 | 55 | 0 | 2 | 4 | 2 | 7 | 59 | 48 | 4 | 18 | 6 | 52 |
| 178 | 40 | 0 | 3 | 3 | 3 | 5 | 55 | 24 | 2 | 5 | 2 | 8 | 59 | 52 | 4 | 19 | 6 | 57 |
| 179 | 39 | 12 | 3 | 4 | 3 | 5 | 55 | 48 | 2 | 5 | 2 | 8 | 59 | 56 | 4 | 20 | 7 | 2 |
| 180 | 38 | 24 | 3 | 4 | 3 | 5 | 56 | 12 | 2 | 5 | 2 | 8 | 60 | 0 | 4 | 21 | 7 | 7 |

| | Saturni | | | | | | Iovis | | | | | | Martis | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hora | | Latitudo septentrionalis descendens | | Latitudo meridionalis ascendens | | Hora | | Latitudo septentrionalis descendens | | Latitudo meridionalis ascendens | | Hora | | Latitudo septentrionalis descendens | | Latitudo meridionalis ascendens | |
| G | M | 2 | G | M | G | M | M | 2 | G | M | G | M | M | 2 | G | M | G | M |
| 181 | 37 | 36 | 3 | 4 | 3 | 5 | 56 | 36 | 2 | 5 | 2 | 8 | 59 | 56 | 4 | 20 | 7 | 2 |
| 182 | 36 | 48 | 3 | 3 | 3 | 5 | 57 | 0 | 2 | 5 | 2 | 8 | 59 | 52 | 4 | 19 | 6 | 57 |
| 183 | 36 | 0 | 3 | 3 | 3 | 4 | 57 | 16 | 2 | 4 | 2 | 7 | 59 | 48 | 4 | 18 | 6 | 52 |
| 184 | 35 | 12 | 3 | 3 | 3 | 4 | 57 | 32 | 2 | 4 | 2 | 7 | 59 | 44 | 4 | 17 | 6 | 47 |
| 185 | 34 | 20 | 3 | 4 | 3 | 4 | 57 | 48 | 2 | 4 | 2 | 7 | 59 | 40 | 4 | 16 | 6 | 42 |
| 186 | 33 | 28 | 3 | 2 | 3 | 4 | 58 | 4 | 2 | 4 | 2 | 7 | 59 | 36 | 4 | 14 | 6 | 36 |
| 187 | 32 | 36 | 3 | 2 | 3 | 4 | 58 | 20 | 2 | 4 | 2 | 7 | 59 | 26 | 4 | 12 | 6 | 27 |
| 188 | 31 | 44 | 3 | 2 | 3 | 4 | 58 | 36 | 2 | 4 | 2 | 7 | 59 | 16 | 4 | 10 | 6 | 18 |
| 189 | 30 | 52 | 3 | 1 | 3 | 3 | 58 | 46 | 2 | 3 | 2 | 6 | 59 | 6 | 4 | 8 | 6 | 9 |
| 190 | 30 | 0 | 3 | 1 | 3 | 3 | 58 | 56 | 2 | 3 | 2 | 6 | 58 | 56 | 4 | 6 | 6 | 0 |
| 191 | 29 | 4 | 3 | 1 | 3 | 3 | 59 | 6 | 2 | 3 | 2 | 6 | 58 | 46 | 4 | 3 | 5 | 51 |
| 192 | 28 | 8 | 3 | 1 | 3 | 3 | 59 | 16 | 2 | 3 | 2 | 6 | 58 | 36 | 4 | 0 | 5 | 42 |
| 193 | 27 | 12 | 3 | 1 | 3 | 3 | 59 | 26 | 2 | 3 | 2 | 6 | 58 | 20 | 3 | 56 | 5 | 34 |
| 194 | 26 | 16 | 3 | 1 | 3 | 3 | 59 | 36 | 2 | 3 | 2 | 6 | 58 | 4 | 3 | 53 | 5 | 27 |
| 195 | 25 | 20 | 3 | 0 | 3 | 2 | 59 | 40 | 2 | 2 | 2 | 5 | 57 | 48 | 3 | 49 | 5 | 19 |
| 196 | 24 | 24 | 3 | 0 | 3 | 2 | 59 | 44 | 2 | 2 | 2 | 5 | 57 | 32 | 3 | 45 | 5 | 11 |
| 197 | 23 | 24 | 3 | 0 | 3 | 2 | 59 | 48 | 2 | 2 | 2 | 5 | 57 | 16 | 3 | 42 | 5 | 3 |
| 198 | 22 | 24 | 3 | 0 | 3 | 2 | 59 | 52 | 2 | 2 | 2 | 5 | 57 | 0 | 3 | 38 | 4 | 55 |
| 199 | 21 | 24 | 3 | 0 | 3 | 2 | 59 | 56 | 2 | 1 | 2 | 5 | 56 | 36 | 3 | 34 | 4 | 47 |
| 200 | 20 | 24 | 3 | 0 | 3 | 1 | 60 | 0 | 2 | 1 | 2 | 4 | 56 | 12 | 3 | 30 | 4 | 39 |
| 201 | 19 | 24 | 2 | 59 | 3 | 1 | 59 | 56 | 2 | 1 | 2 | 4 | 55 | 48 | 3 | 26 | 4 | 31 |
| 202 | 18 | 24 | 2 | 59 | 3 | 1 | 59 | 52 | 2 | 1 | 2 | 4 | 55 | 24 | 3 | 23 | 4 | 23 |
| 203 | 17 | 24 | 2 | 59 | 3 | 0 | 59 | 48 | 2 | 0 | 2 | 3 | 55 | 0 | 3 | 19 | 4 | 16 |
| 204 | 16 | 24 | 2 | 59 | 3 | 0 | 59 | 44 | 2 | 0 | 2 | 3 | 54 | 36 | 3 | 16 | 4 | 9 |
| 205 | 15 | 24 | 2 | 59 | 3 | 0 | 59 | 40 | 2 | 0 | 2 | 2 | 54 | 10 | 3 | 12 | 4 | 2 |
| 206 | 14 | 24 | 2 | 58 | 2 | 59 | 59 | 36 | 1 | 59 | 2 | 2 | 53 | 44 | 3 | 9 | 3 | 55 |
| 207 | 13 | 24 | 2 | 58 | 2 | 59 | 59 | 26 | 1 | 59 | 2 | 1 | 53 | 18 | 3 | 5 | 3 | 48 |
| 208 | 12 | 24 | 2 | 58 | 2 | 59 | 59 | 16 | 1 | 59 | 2 | 1 | 52 | 52 | 3 | 2 | 3 | 41 |
| 209 | 11 | 24 | 2 | 57 | 2 | 58 | 59 | 6 | 1 | 58 | 2 | 0 | 52 | 26 | 2 | 58 | 3 | 34 |
| 210 | 10 | 24 | 2 | 57 | 2 | 58 | 58 | 56 | 1 | 58 | 2 | 0 | 52 | 0 | 2 | 55 | 3 | 27 |
| 211 | 9 | 24 | 2 | 57 | 2 | 57 | 58 | 46 | 1 | 57 | 1 | 59 | 51 | 34 | 2 | 51 | 3 | 23 |
| 212 | 8 | 24 | 2 | 56 | 2 | 57 | 58 | 36 | 1 | 57 | 1 | 59 | 50 | 48 | 2 | 47 | 3 | 18 |
| 213 | 7 | 24 | 2 | 56 | 2 | 56 | 58 | 20 | 1 | 56 | 1 | 58 | 50 | 12 | 2 | 43 | 3 | 12 |
| 214 | 6 | 24 | 2 | 56 | 2 | 56 | 58 | 4 | 1 | 56 | 1 | 58 | 49 | 36 | 2 | 40 | 3 | 6 |
| 215 | 5 | 20 | 2 | 55 | 2 | 55 | 57 | 48 | 1 | 55 | 1 | 57 | 49 | 0 | 2 | 37 | 3 | 1 |
| 216 | 4 | 16 | 2 | 55 | 2 | 55 | 57 | 32 | 1 | 55 | 1 | 57 | 48 | 24 | 2 | 34 | 2 | 56 |
| 217 | 3 | 12 | 2 | 55 | 2 | 55 | 57 | 16 | 1 | 55 | 1 | 56 | 47 | 44 | 2 | 31 | 2 | 53 |
| 218 | 2 | 8 | 2 | 54 | 2 | 55 | 57 | 0 | 1 | 54 | 1 | 56 | 47 | 4 | 2 | 28 | 2 | 49 |
| 219 | 1 | 4 | 2 | 54 | 2 | 54 | 56 | 36 | 1 | 54 | 1 | 55 | 46 | 24 | 2 | 25 | 2 | 45 |
| 220 | 0 | 0 | 2 | 54 | 2 | 54 | 56 | 12 | 1 | 53 | 1 | 55 | 45 | 44 | 2 | 20 | 2 | 41 |
| 221 | 1 | 4 | 2 | 53 | 2 | 54 | 55 | 48 | 1 | 53 | 1 | 54 | 45 | 4 | 2 | 19 | 2 | 37 |
| 222 | 2 | 8 | 2 | 53 | 2 | 54 | 55 | 24 | 1 | 52 | 1 | 54 | 44 | 24 | 2 | 16 | 2 | 33 |
| 223 | 3 | 12 | 2 | 52 | 2 | 54 | 55 | 0 | 1 | 52 | 1 | 53 | 43 | 40 | 2 | 13 | 2 | 29 |
| 224 | 4 | 16 | 2 | 52 | 2 | 53 | 54 | 36 | 1 | 51 | 1 | 53 | 42 | 56 | 2 | 10 | 2 | 24 |
| 225 | 5 | 20 | 2 | 51 | 2 | 53 | 54 | 10 | 1 | 51 | 1 | 52 | 42 | 12 | 2 | 7 | 2 | 21 |

## Saturni

| Hore | | | Latitudo septentrionalis descendens | | Latitudo meridionalis ascendens | |
|---|---|---|---|---|---|---|
| G | M | S | G | M | G | M |
| 226 | 6 | 24 | 2 | 51 | 2 | 52 |
| 227 | 7 | 24 | 2 | 50 | 2 | 52 |
| 228 | 8 | 24 | 2 | 50 | 2 | 51 |
| 229 | 9 | 24 | 2 | 49 | 2 | 51 |
| 230 | 10 | 24 | 2 | 49 | 2 | 50 |
| 231 | 11 | 24 | 2 | 48 | 2 | 50 |
| 232 | 12 | 24 | 2 | 48 | 2 | 49 |
| 233 | 13 | 24 | 2 | 48 | 2 | 49 |
| 234 | 14 | 24 | 2 | 47 | 2 | 48 |
| 235 | 15 | 24 | 2 | 47 | 2 | 47 |
| 236 | 16 | 24 | 2 | 46 | 2 | 47 |
| 237 | 17 | 24 | 2 | 46 | 2 | 46 |
| 238 | 18 | 24 | 2 | 46 | 2 | 46 |
| 239 | 19 | 24 | 2 | 45 | 2 | 45 |
| 240 | 20 | 24 | 2 | 45 | 2 | 45 |
| 241 | 21 | 24 | 2 | 44 | 2 | 44 |
| 242 | 22 | 24 | 2 | 44 | 2 | 44 |
| 243 | 23 | 24 | 2 | 44 | 2 | 44 |
| 244 | 24 | 24 | 2 | 43 | 2 | 43 |
| 245 | 25 | 20 | 2 | 43 | 2 | 43 |
| 246 | 26 | 16 | 2 | 42 | 2 | 42 |
| 247 | 27 | 12 | 2 | 42 | 2 | 42 |
| 248 | 28 | 8 | 2 | 41 | 2 | 41 |
| 249 | 29 | 4 | 2 | 41 | 2 | 41 |
| 250 | 30 | 0 | 2 | 40 | 2 | 40 |
| 251 | 30 | 52 | 2 | 40 | 2 | 40 |
| 252 | 31 | 48 | 2 | 39 | 2 | 39 |
| 253 | 32 | 36 | 2 | 39 | 2 | 39 |
| 254 | 33 | 28 | 2 | 38 | 2 | 38 |
| 255 | 34 | 20 | 2 | 38 | 2 | 38 |
| 256 | 35 | 12 | 2 | 37 | 2 | 37 |
| 257 | 36 | 0 | 2 | 37 | 2 | 37 |
| 258 | 36 | 48 | 2 | 36 | 2 | 36 |
| 259 | 37 | 36 | 2 | 35 | 2 | 36 |
| 260 | 38 | 24 | 2 | 35 | 2 | 35 |
| 261 | 39 | 12 | 2 | 35 | 2 | 35 |
| 262 | 40 | 0 | 2 | 34 | 2 | 34 |
| 263 | 40 | 44 | 2 | 34 | 2 | 34 |
| 264 | 41 | 28 | 2 | 33 | 2 | 33 |
| 265 | 42 | 12 | 2 | 33 | 2 | 33 |
| 266 | 42 | 56 | 2 | 32 | 2 | 32 |
| 267 | 43 | 42 | 2 | 32 | 2 | 32 |
| 268 | 44 | 24 | 2 | 31 | 2 | 31 |
| 269 | 45 | 4 | 2 | 31 | 2 | 31 |
| 270 | 45 | 44 | 2 | 30 | 2 | 30 |

## Iouis

| Hore | | Latitudo septentrionalis descendens | | Latitudo meridionalis ascendens | |
|---|---|---|---|---|---|
| M | S | G | M | G | M |
| 53 | 44 | 1 | 51 | 1 | 52 |
| 53 | 18 | 1 | 50 | 1 | 51 |
| 52 | 52 | 1 | 50 | 1 | 51 |
| 52 | 26 | 1 | 50 | 1 | 50 |
| 52 | 0 | 1 | 49 | 1 | 50 |
| 51 | 24 | 1 | 49 | 1 | 49 |
| 50 | 48 | 1 | 49 | 1 | 49 |
| 50 | 12 | 1 | 48 | 1 | 48 |
| 49 | 36 | 1 | 48 | 1 | 48 |
| 49 | 0 | 1 | 48 | 1 | 48 |
| 48 | 24 | 1 | 47 | 1 | 47 |
| 47 | 44 | 1 | 47 | 1 | 47 |
| 47 | 4 | 1 | 46 | 1 | 46 |
| 46 | 24 | 1 | 46 | 1 | 46 |
| 45 | 44 | 1 | 45 | 1 | 45 |
| 45 | 4 | 1 | 45 | 1 | 45 |
| 44 | 24 | 1 | 44 | 1 | 44 |
| 43 | 40 | 1 | 44 | 1 | 44 |
| 42 | 56 | 1 | 43 | 1 | 43 |
| 42 | 12 | 1 | 43 | 1 | 43 |
| 41 | 28 | 1 | 42 | 1 | 42 |
| 40 | 44 | 1 | 42 | 1 | 42 |
| 40 | 0 | 1 | 41 | 1 | 41 |
| 39 | 12 | 1 | 41 | 1 | 41 |
| 38 | 24 | 1 | 40 | 1 | 40 |
| 37 | 36 | 1 | 40 | 1 | 40 |
| 36 | 48 | 1 | 39 | 1 | 39 |
| 36 | 0 | 1 | 39 | 1 | 39 |
| 35 | 12 | 1 | 38 | 1 | 38 |
| 34 | 20 | 1 | 38 | 1 | 38 |
| 33 | 28 | 1 | 37 | 1 | 37 |
| 32 | 36 | 1 | 37 | 1 | 37 |
| 31 | 44 | 1 | 36 | 1 | 36 |
| 30 | 52 | 1 | 36 | 1 | 36 |
| 30 | 0 | 1 | 35 | 1 | 35 |
| 29 | 4 | 1 | 35 | 1 | 35 |
| 28 | 8 | 1 | 34 | 1 | 34 |
| 27 | 12 | 1 | 34 | 1 | 34 |
| 26 | 16 | 1 | 33 | 1 | 33 |
| 25 | 20 | 1 | 33 | 1 | 33 |
| 24 | 24 | 1 | 32 | 1 | 32 |
| 23 | 24 | 1 | 32 | 1 | 32 |
| 22 | 24 | 1 | 31 | 1 | 31 |
| 21 | 24 | 1 | 31 | 1 | 31 |
| 20 | 24 | 1 | 30 | 1 | 30 |

## Martis

| Hora | | Latitudo septentrionalis descendens | | Latitudo meridionalis ascendens | |
|---|---|---|---|---|---|
| M | S | G | M | G | M |
| 41 | 28 | 2 | 5 | 1 | 17 |
| 40 | 44 | 2 | 3 | 1 | 13 |
| 40 | 0 | 2 | 1 | 1 | 10 |
| 39 | 12 | 1 | 58 | 1 | 6 |
| 38 | 24 | 1 | 56 | 1 | 3 |
| 37 | 36 | 1 | 54 | 1 | 0 |
| 36 | 48 | 1 | 51 | 1 | 57 |
| 36 | 0 | 1 | 49 | 1 | 54 |
| 35 | 12 | 1 | 47 | 1 | 51 |
| 34 | 20 | 1 | 44 | 1 | 48 |
| 33 | 28 | 1 | 42 | 1 | 46 |
| 32 | 36 | 1 | 40 | 1 | 44 |
| 31 | 44 | 1 | 38 | 1 | 41 |
| 30 | 52 | 1 | 36 | 1 | 39 |
| 30 | 0 | 1 | 34 | 1 | 37 |
| 29 | 4 | 1 | 32 | 1 | 34 |
| 28 | 8 | 1 | 30 | 1 | 32 |
| 27 | 12 | 1 | 28 | 1 | 30 |
| 26 | 16 | 1 | 26 | 1 | 28 |
| 25 | 20 | 1 | 24 | 1 | 26 |
| 24 | 24 | 1 | 23 | 1 | 24 |
| 23 | 24 | 1 | 21 | 1 | 22 |
| 22 | 24 | 1 | 20 | 1 | 20 |
| 21 | 24 | 1 | 18 | 1 | 18 |
| 20 | 24 | 1 | 17 | 1 | 16 |
| 19 | 24 | 1 | 15 | 1 | 15 |
| 18 | 24 | 1 | 14 | 1 | 13 |
| 17 | 24 | 1 | 12 | 1 | 12 |
| 16 | 24 | 1 | 11 | 1 | 10 |
| 15 | 24 | 1 | 10 | 1 | 9 |
| 14 | 24 | 1 | 8 | 1 | 5 |
| 13 | 24 | 1 | 7 | 1 | 6 |
| 12 | 24 | 1 | 6 | 1 | 4 |
| 11 | 24 | 1 | 4 | 1 | 3 |
| 10 | 24 | 1 | 3 | 1 | 2 |
| 9 | 24 | 1 | 2 | 1 | 0 |
| 8 | 24 | 1 | 1 | 0 | 59 |
| 7 | 24 | 1 | 0 | 0 | 57 |
| 6 | 24 | 0 | 59 | 0 | 56 |
| 5 | 20 | 0 | 57 | 0 | 54 |
| 4 | 16 | 0 | 56 | 0 | 53 |
| 3 | 12 | 0 | 55 | 0 | 52 |
| 2 | 8 | 0 | 54 | 0 | 51 |
| 1 | 4 | 0 | 53 | 0 | 50 |
| 0 | 0 | 0 | 52 | 0 | 49 |

## Saturni

| Hora | | | Latitudo stelle descens | | Latitudo meridionalis ascens | |
|---|---|---|---|---|---|---|
| G | M | S | G | M | G | M |
| 271 | 46 | 36 | 2 | 30 | 2 | 30 |
| 272 | 47 | 12 | 2 | 29 | 2 | 29 |
| 273 | 47 | 48 | 2 | 29 | 2 | 29 |
| 274 | 48 | 24 | 2 | 28 | 2 | 28 |
| 275 | 49 | 0 | 2 | 28 | 2 | 28 |
| 276 | 49 | 36 | 2 | 27 | 2 | 27 |
| 277 | 49 | 12 | 2 | 27 | 2 | 27 |
| 278 | 50 | 48 | 2 | 26 | 2 | 26 |
| 279 | 50 | 24 | 2 | 26 | 2 | 26 |
| 280 | 51 | 0 | 2 | 25 | 2 | 25 |
| 281 | 52 | 26 | 2 | 25 | 2 | 25 |
| 282 | 52 | 52 | 2 | 24 | 2 | 24 |
| 283 | 53 | 18 | 2 | 24 | 2 | 24 |
| 284 | 53 | 44 | 2 | 23 | 2 | 23 |
| 285 | 54 | 10 | 2 | 22 | 2 | 23 |
| 286 | 54 | 36 | 2 | 22 | 2 | 22 |
| 287 | 55 | 0 | 2 | 21 | 2 | 22 |
| 288 | 55 | 24 | 2 | 21 | 2 | 21 |
| 289 | 55 | 48 | 2 | 20 | 2 | 21 |
| 290 | 56 | 12 | 2 | 20 | 2 | 20 |
| 291 | 56 | 36 | 2 | 19 | 2 | 20 |
| 292 | 57 | 0 | 2 | 19 | 2 | 19 |
| 293 | 57 | 16 | 2 | 18 | 2 | 19 |
| 294 | 57 | 32 | 2 | 18 | 2 | 18 |
| 295 | 58 | 48 | 2 | 18 | 2 | 18 |
| 296 | 58 | 4 | 2 | 17 | 2 | 17 |
| 297 | 58 | 20 | 2 | 17 | 2 | 17 |
| 298 | 58 | 36 | 2 | 17 | 2 | 16 |
| 299 | 58 | 46 | 2 | 16 | 2 | 16 |
| 300 | 58 | 56 | 2 | 16 | 2 | 15 |
| 301 | 59 | 6 | 2 | 16 | 2 | 15 |
| 302 | 59 | 16 | 2 | 15 | 2 | 15 |
| 303 | 59 | 26 | 2 | 15 | 2 | 15 |
| 304 | 59 | 36 | 2 | 15 | 2 | 14 |
| 305 | 59 | 40 | 2 | 14 | 2 | 13 |
| 306 | 59 | 44 | 2 | 14 | 2 | 13 |
| 307 | 59 | 48 | 2 | 14 | 2 | 12 |
| 308 | 59 | 52 | 2 | 13 | 2 | 12 |
| 309 | 59 | 56 | 2 | 13 | 2 | 11 |
| 310 | 59 | 0 | 2 | 13 | 2 | 11 |
| 311 | 59 | 56 | 2 | 12 | 2 | 10 |
| 312 | 59 | 52 | 2 | 12 | 2 | 10 |
| 313 | 59 | 48 | 2 | 12 | 2 | 9 |
| 314 | 59 | 44 | 2 | 12 | 2 | 9 |
| 315 | 59 | 40 | 2 | 11 | 2 | 8 |

## Iovis

| Hora | | Latitudo stelle descens | | Latitudo meridionalis ascens | |
|---|---|---|---|---|---|
| M | S | G | M | G | M |
| 19 | 24 | 1 | 30 | 1 | 30 |
| 18 | 24 | 1 | 29 | 1 | 29 |
| 17 | 24 | 1 | 29 | 1 | 29 |
| 16 | 24 | 1 | 28 | 1 | 28 |
| 15 | 24 | 1 | 28 | 1 | 28 |
| 14 | 24 | 1 | 27 | 1 | 27 |
| 13 | 24 | 1 | 27 | 1 | 27 |
| 12 | 24 | 1 | 26 | 1 | 26 |
| 11 | 24 | 1 | 26 | 1 | 26 |
| 10 | 24 | 1 | 25 | 1 | 25 |
| 9 | 24 | 1 | 25 | 1 | 25 |
| 8 | 24 | 1 | 24 | 1 | 24 |
| 7 | 24 | 1 | 24 | 1 | 24 |
| 6 | 24 | 1 | 23 | 1 | 23 |
| 5 | 20 | 1 | 23 | 1 | 23 |
| 4 | 16 | 1 | 22 | | 22 |
| 3 | 12 | 1 | 22 | | 22 |
| 2 | 8 | 1 | 21 | | 21 |
| 1 | 4 | 1 | 21 | 1 | 21 |
| 0 | 0 | 1 | 20 | 1 | 20 |
| 1 | 4 | 1 | 20 | 1 | 20 |
| 2 | 8 | 1 | 19 | 1 | 19 |
| 3 | 12 | 1 | 19 | 1 | 19 |
| 4 | 16 | 1 | 18 | 1 | 18 |
| 5 | 20 | 1 | 18 | 1 | 18 |
| 6 | 24 | 1 | 17 | 1 | 17 |
| 7 | 24 | 1 | 17 | 1 | 17 |
| 8 | 24 | 1 | 17 | 1 | 17 |
| 9 | 24 | 1 | 16 | 1 | 16 |
| 10 | 24 | 1 | 16 | 1 | 16 |
| 11 | 24 | 1 | 16 | 1 | 16 |
| 12 | 24 | 1 | 15 | 1 | 15 |
| 13 | 24 | 1 | 15 | 1 | 15 |
| 14 | 24 | 1 | 15 | 1 | 14 |
| 15 | 24 | 1 | 14 | 1 | 14 |
| 16 | 24 | 1 | 14 | 1 | 13 |
| 17 | 24 | 1 | 14 | 1 | 13 |
| 18 | 24 | 1 | 14 | 1 | 13 |
| 19 | 24 | 1 | 13 | 1 | 12 |
| 20 | 24 | 1 | 13 | 1 | 12 |
| 21 | 24 | 1 | 13 | 1 | 12 |
| 22 | 24 | 1 | 13 | 1 | 11 |
| 23 | 24 | 1 | 13 | 1 | 11 |
| 24 | 24 | 1 | 13 | 1 | 11 |
| 25 | 20 | 1 | 12 | 1 | 0 |

## Martis

| Hora | | Latitudo stelle descens | | Latitudo meridionalis ascens | |
|---|---|---|---|---|---|
| M | S | G | M | G | M |
| 1 | 4 | 0 | 50 | 0 | 47 |
| 2 | 8 | 0 | 51 | 0 | 46 |
| 3 | 12 | 0 | 49 | 0 | 45 |
| 4 | 16 | 0 | 48 | 0 | 44 |
| 5 | 20 | 0 | 47 | 0 | 43 |
| 6 | 24 | 0 | 46 | 0 | 42 |
| 7 | 24 | 0 | 45 | 0 | 41 |
| 8 | 24 | 0 | 44 | 0 | 40 |
| 9 | 24 | 0 | 43 | 0 | 39 |
| 10 | 24 | 0 | 42 | 0 | 38 |
| 11 | 24 | 0 | 41 | 0 | 37 |
| 12 | 24 | 0 | 40 | 0 | 36 |
| 13 | 24 | 0 | 40 | 0 | 35 |
| 14 | 24 | 0 | 39 | 0 | 34 |
| 15 | 24 | 0 | 38 | 0 | 33 |
| 16 | 24 | 0 | 37 | 0 | 32 |
| 17 | 24 | 0 | 36 | 0 | 31 |
| 18 | 24 | 0 | 36 | 0 | 30 |
| 19 | 24 | 0 | 35 | 0 | 29 |
| 20 | 24 | 0 | 35 | 0 | 28 |
| 21 | 24 | 0 | 34 | 0 | 28 |
| 22 | 24 | 0 | 33 | 0 | 27 |
| 23 | 24 | 0 | 32 | 0 | 26 |
| 24 | 24 | 0 | 32 | 0 | 26 |
| 25 | 20 | 0 | 31 | 0 | 25 |
| 26 | 16 | 0 | 30 | 0 | 24 |
| 27 | 12 | 0 | 29 | 0 | 24 |
| 28 | 8 | 0 | 29 | 0 | 23 |
| 29 | 4 | 0 | 28 | 0 | 23 |
| 30 | 0 | 0 | 28 | 0 | 22 |
| 30 | 42 | 0 | 27 | 0 | 21 |
| 31 | 44 | 0 | 26 | 0 | 20 |
| 32 | 36 | 0 | 26 | 0 | 19 |
| 33 | 28 | 0 | 25 | 0 | 19 |
| 34 | 20 | 0 | 24 | 0 | 18 |
| 35 | 12 | 0 | 24 | 0 | 18 |
| 36 | 0 | 0 | 23 | 0 | 17 |
| 36 | 48 | 0 | 23 | 0 | 17 |
| 37 | 36 | 0 | 22 | 0 | 16 |
| 38 | 24 | 0 | 22 | 0 | 16 |
| 39 | 12 | 0 | 21 | 0 | 15 |
| 40 | 0 | 0 | 21 | 0 | 15 |
| 40 | 44 | 0 | 20 | 0 | 14 |
| 41 | 28 | 0 | 20 | 0 | 14 |
| 42 | 12 | 0 | 19 | 0 | 13 |

| Saturni |  |  |  |  |  |  |
|---|---|---|---|---|---|---|
| Prora |  |  | Latitudo Saturni descens |  | Latitudo meridionalis ascens |  |
| G | m | 2 | G | m | G | m |
| 316 | 59 | 36 | 2 | 11 | 2 | 8 |
| 317 | 59 | 26 | 2 | 11 | 2 | 8 |
| 318 | 59 | 16 | 2 | 11 | 2 | 8 |
| 319 | 59 | 6 | 2 | 11 | 2 | 8 |
| 320 | 58 | 56 | 2 | 11 | 2 | 8 |
| 321 | 58 | 46 | 2 | 10 | 2 | 7 |
| 322 | 58 | 36 | 2 | 10 | 2 | 7 |
| 323 | 58 | 20 | 2 | 10 | 2 | 7 |
| 324 | 58 | 4 | 2 | 10 | 2 | 7 |
| 325 | 57 | 48 | 2 | 10 | 2 | 7 |
| 326 | 57 | 32 | 2 | 9 | 2 | 7 |
| 327 | 57 | 16 | 2 | 9 | 2 | 6 |
| 328 | 57 | 0 | 2 | 9 | 2 | 6 |
| 329 | 56 | 36 | 2 | 8 | 2 | 6 |
| 330 | 56 | 12 | 2 | 8 | 2 | 6 |
| 331 | 55 | 48 | 2 | 8 | 2 | 6 |
| 332 | 55 | 24 | 2 | 8 | 2 | 6 |
| 333 | 55 | 0 | 2 | 7 | 2 | 5 |
| 334 | 54 | 36 | 2 | 7 | 2 | 5 |
| 335 | 54 | 10 | 2 | 7 | 2 | 5 |
| 336 | 53 | 44 | 2 | 7 | 2 | 5 |
| 337 | 53 | 18 | 2 | 7 | 2 | 5 |
| 338 | 52 | 52 | 2 | 7 | 2 | 5 |
| 339 | 52 | 26 | 2 | 6 | 2 | 4 |
| 340 | 52 | 0 | 2 | 6 | 2 | 4 |
| 341 | 51 | 34 | 2 | 6 | 2 | 4 |
| 342 | 50 | 48 | 2 | 6 | 2 | 4 |
| 343 | 50 | 12 | 2 | 6 | 2 | 4 |
| 344 | 49 | 36 | 2 | 6 | 2 | 4 |
| 345 | 49 | 0 | 2 | 5 | 2 | 3 |
| 346 | 48 | 24 | 2 | 5 | 2 | 3 |
| 347 | 47 | 44 | 2 | 5 | 2 | 3 |
| 348 | 47 | 4 | 2 | 4 | 2 | 3 |
| 349 | 46 | 24 | 2 | 4 | 2 | 3 |
| 350 | 45 | 44 | 2 | 4 | 2 | 3 |
| 351 | 45 | 4 | 2 | 3 | 2 | 2 |
| 352 | 44 | 24 | 2 | 3 | 2 | 2 |
| 353 | 43 | 40 | 2 | 3 | 2 | 2 |
| 354 | 42 | 56 | 2 | 3 | 2 | 2 |
| 355 | 42 | 12 | 2 | 3 | 2 | 2 |
| 356 | 41 | 28 | 2 | 3 | 2 | 2 |
| 357 | 40 | 44 | 2 | 2 | 2 | 1 |
| 358 | 40 | 0 | 2 | 2 | 2 | 1 |
| 359 | 39 | 12 | 2 | 2 | 2 | 1 |
| 360 | 38 | 24 | 2 | 2 | 2 | 1 |

| Iouis |  |  |  |  |  |
|---|---|---|---|---|---|
| Prora |  | Latitudo Iouis descens |  | Latitudo meridionalis ascens |  |
| m | 2 | G | m | G | m |
| 26 | 16 | 1 | 12 | 1 | 10 |
| 27 | 12 | 1 | 12 | 1 | 10 |
| 28 | 8 | 1 | 12 | 1 | 10 |
| 29 | 4 | 1 | 12 | 1 | 10 |
| 30 | 0 | 1 | 12 | 1 | 10 |
| 30 | 52 | 1 | 11 | 1 | 9 |
| 31 | 44 | 1 | 11 | 1 | 9 |
| 32 | 36 | 1 | 11 | 1 | 9 |
| 33 | 28 | 1 | 11 | 1 | 9 |
| 34 | 20 | 1 | 11 | 1 | 9 |
| 35 | 12 | 1 | 11 | 1 | 9 |
| 36 | 0 | 1 | 10 | 1 | 8 |
| 36 | 48 | 1 | 10 | 1 | 8 |
| 37 | 36 | 1 | 10 | 1 | 8 |
| 38 | 24 | 1 | 10 | 1 | 8 |
| 39 | 12 | 1 | 10 | 1 | 8 |
| 40 | 0 | 1 | 10 | 1 | 8 |
| 40 | 44 | 1 | 9 | 1 | 7 |
| 41 | 28 | 1 | 9 | 1 | 7 |
| 42 | 12 | 1 | 9 | 1 | 7 |
| 42 | 56 | 1 | 9 | 1 | 7 |
| 43 | 40 | 1 | 9 | 1 | 7 |
| 44 | 24 | 1 | 9 | 1 | 7 |
| 45 | 4 | 1 | 8 | 1 | 6 |
| 45 | 44 | 1 | 8 | 1 | 6 |
| 46 | 24 | 1 | 8 | 1 | 6 |
| 47 | 4 | 1 | 8 | 1 | 6 |
| 47 | 44 | 1 | 8 | 1 | 6 |
| 48 | 24 | 1 | 8 | 1 | 6 |
| 49 | 0 | 1 | 8 | 1 | 6 |
| 49 | 36 | 1 | 8 | 1 | 6 |
| 50 | 12 | 1 | 8 | 1 | 6 |
| 50 | 48 | 1 | 8 | 1 | 6 |
| 51 | 24 | 1 | 8 | 1 | 6 |
| 52 | 0 | 1 | 8 | 1 | 6 |
| 52 | 26 | 1 | 7 | 1 | 5 |
| 52 | 52 | 1 | 7 | 1 | 5 |
| 53 | 18 | 1 | 7 | 1 | 5 |
| 53 | 44 | 1 | 7 | 1 | 5 |
| 54 | 10 | 1 | 7 | 1 | 5 |
| 54 | 36 | 1 | 7 | 1 | 5 |
| 55 | 0 | 1 | 7 | 1 | 5 |
| 55 | 24 | 1 | 6 | 1 | 5 |
| 55 | 48 | 1 | 6 | 1 | 4 |
| 56 | 12 | 1 | 6 | 1 | 4 |

| Martis |  |  |  |  |  |
|---|---|---|---|---|---|
| Prora |  | Latitudo Martis descens |  | Latitudo meridionalis ascens |  |
| m | 2 | G | m | G | m |
| 42 | 56 | 0 | 19 | 0 | 13 |
| 43 | 40 | 0 | 18 | 0 | 12 |
| 44 | 24 | 0 | 18 | 0 | 12 |
| 45 | 4 | 0 | 18 | 0 | 11 |
| 45 | 44 | 0 | 17 | 0 | 11 |
| 46 | 24 | 0 | 17 | 0 | 10 |
| 47 | 4 | 0 | 17 | 0 | 10 |
| 47 | 44 | 0 | 16 | 0 | 9 |
| 48 | 24 | 0 | 16 | 0 | 9 |
| 49 | 0 | 0 | 16 | 0 | 9 |
| 49 | 36 | 0 | 16 | 0 | 9 |
| 50 | 12 | 0 | 15 | 0 | 9 |
| 50 | 48 | 0 | 15 | 0 | 8 |
| 51 | 24 | 0 | 15 | 0 | 8 |
| 52 | 0 | 0 | 14 | 0 | 8 |
| 52 | 26 | 0 | 14 | 0 | 8 |
| 52 | 52 | 0 | 14 | 0 | 8 |
| 53 | 18 | 0 | 13 | 0 | 7 |
| 53 | 44 | 0 | 13 | 0 | 7 |
| 54 | 18 | 0 | 13 | 0 | 7 |
| 54 | 36 | 0 | 13 | 0 | 7 |
| 55 | 0 | 0 | 13 | 0 | 7 |
| 55 | 24 | 0 | 12 | 0 | 6 |
| 55 | 48 | 0 | 12 | 0 | 6 |
| 56 | 12 | 0 | 12 | 0 | 6 |
| 56 | 36 | 0 | 11 | 0 | 5 |
| 57 | 0 | 0 | 11 | 0 | 5 |
| 57 | 16 | 0 | 11 | 0 | 5 |
| 57 | 32 | 0 | 11 | 0 | 5 |
| 57 | 48 | 0 | 10 | 0 | 4 |
| 58 | 4 | 0 | 10 | 0 | 4 |
| 58 | 20 | 0 | 10 | 0 | 4 |
| 58 | 36 | 0 | 9 | 0 | 4 |
| 58 | 46 | 0 | 9 | 0 | 4 |
| 58 | 56 | 0 | 9 | 0 | 4 |
| 59 | 6 | 0 | 8 | 0 | 4 |
| 59 | 16 | 0 | 8 | 0 | 3 |
| 59 | 26 | 0 | 7 | 0 | 3 |
| 59 | 36 | 0 | 7 | 0 | 3 |
| 59 | 40 | 0 | 7 | 0 | 3 |
| 59 | 40 | 0 | 6 | 0 | 3 |
| 59 | 48 | 0 | 6 | 0 | 2 |
| 59 | 52 | 0 | 5 | 0 | 2 |
| 59 | 56 | 0 | 5 | 0 | 2 |
| 60 | 0 | 0 | 5 | 0 | 2 |

## Veneris

| G | Declinacio G | Declinacio M | Reflexio G | Reflexio M | M ad declinationem M | M ad declinationem S | M ad reflexionem M | M ad reflexionem S | Septentrionalis descendens M | Septentrionalis descendens S |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 3 | 0 | 1 | 1 | 4 | 59 | 58 | 9 | 59 |
| 2 | 1 | 3 | 0 | 2 | 2 | 8 | 59 | 52 | 9 | 59 |
| 3 | 1 | 3 | 0 | 3 | 3 | 12 | 59 | 48 | 9 | 58 |
| 4 | 1 | 2 |  | 5 | 4 | 16 | 59 | 44 | 9 | 57 |
| 5 | 1 | 2 |  | 6 | 5 | 20 | 59 | 40 |  | 56 |
| 6 | 1 | 2 |  | 8 | 6 | 24 | 59 | 36 |  | 56 |
| 7 | 1 | 2 |  | 9 | 7 | 24 | 59 | 26 |  | 55 |
| 8 | 1 | 2 |  | 11 | 8 | 24 | 59 | 16 |  | 53 |
| 9 | 1 | 2 |  | 12 | 9 |  | 58 | 6 |  | 51 |
| 10 | 1 | 1 |  | 14 | 10 |  | 58 | 56 |  | 49 |
| 11 | 1 | 1 |  | 15 | 11 |  | 58 | 46 |  | 47 |
| 12 | 1 | 1 |  | 16 | 12 |  | 58 | 36 |  | 46 |
| 13 | 1 | 1 |  | 17 | 13 |  | 58 | 20 |  | 44 |
| 14 | 1 | 1 |  | 18 | 14 |  | 58 | 4 | 9 | 42 |
| 15 | 1 | 1 |  | 20 | 15 | 24 | 57 | 48 | 9 | 39 |
| 16 | 1 | 0 |  | 21 | 16 | 24 | 57 | 32 | 9 | 36 |
| 17 | 1 | 0 |  | 22 | 17 | 24 | 57 | 6 |  | 33 |
| 18 | 1 | 0 | 0 | 24 | 18 |  | 57 | 0 |  | 30 |
| 19 | 1 | 0 | 0 | 25 | 19 |  | 56 | 36 |  | 26 |
| 20 | 1 | 0 | 0 | 27 | 20 |  | 56 | 12 |  | 22 |
| 21 | 1 | 0 |  | 28 | 21 |  | 55 | 48 |  | 18 |
| 22 | 0 | 59 |  | 29 | 22 |  | 55 | 24 |  | 14 |
| 23 | 0 | 59 |  | 31 | 23 | 24 | 55 | 0 |  | 10 |
| 24 | 0 | 59 |  | 33 | 24 | 24 | 54 | 36 | 9 | 6 |
| 25 | 0 | 59 |  | 34 | 25 | 20 | 54 | 10 | 9 | 2 |
| 26 | 0 | 58 |  | 36 | 26 | 16 | 53 | 44 | 8 | 58 |
| 27 | 0 | 58 |  | 37 | 27 | 12 | 53 | 18 | 8 | 53 |
| 28 | 0 | 58 |  | 39 | 28 | 8 | 52 | 52 |  | 49 |
| 29 | 0 | 57 |  | 40 | 29 | 4 | 52 | 28 |  | 45 |
| 30 | 0 | 57 |  | 41 | 30 | 0 | 52 | 0 |  | 40 |
| 31 | 0 | 57 |  | 42 | 30 | 52 | 51 | 24 | 8 | 34 |
| 32 | 0 | 56 |  | 44 | 31 | 44 | 50 | 48 | 8 | 28 |
| 33 | 0 | 56 |  | 45 | 32 | 36 | 50 | 12 |  | 22 |
| 34 | 0 | 56 |  | 47 | 33 | 28 | 49 | 36 |  | 16 |
| 35 | 0 | 55 |  | 48 | 34 | 20 | 49 | 0 | 8 | 10 |
| 36 | 0 | 55 |  | 49 | 35 | 12 | 48 | 24 | 8 | 4 |
| 37 | 0 | 54 |  | 51 | 36 | 0 | 47 | 44 | 7 | 58 |
| 38 | 0 | 54 |  | 52 | 36 | 44 | 47 | 4 | 7 | 52 |
| 39 | 0 | 53 |  | 53 | 37 | 36 | 46 | 24 |  | 45 |
| 40 | 0 | 52 |  | 55 | 38 | 24 | 45 | 40 |  | 38 |
| 41 | 0 | 52 |  | 56 | 39 | 12 | 45 | 0 | 7 | 31 |
| 42 | 0 | 51 |  | 57 | 40 | 0 | 44 | 22 | 7 | 22 |
| 43 | 0 | 51 | 0 | 58 | 40 | 44 | 43 | 40 |  | 17 |
| 44 | 0 | 50 | 0 | 0 | 41 | 28 | 42 | 56 | 7 | 10 |
| 45 | 0 | 49 | 0 | 1 | 42 | 12 | 42 | 12 | 7 | 3 |

## Mercurii

| Declinacio G | Declinacio M | Reflexio G | Reflexio M | M ad declinacionem M | M ad declinacionem S | M ad reflexionem M | M ad reflexionem S | Meridionalis ascendens M | Meridionalis ascendens S |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 46 | 0 | 1 | 1 | 4 | 53 | 56 | 44 | 57 |
| 1 | 46 | 0 | 3 | 2 | 8 | 53 | 53 | 44 | 54 |
| 1 | 45 | 0 | 5 | 3 | 12 |  | 49 |  | 51 |
| 1 | 45 |  | 7 | 4 | 16 |  | 45 |  | 48 |
| 1 | 45 |  | 9 | 5 | 20 | 53 | 41 |  | 45 |
| 1 | 45 |  | 11 | 6 | 24 |  | 38 | 44 | 42 |
| 1 | 45 |  | 13 | 7 | 24 |  | 29 |  | 35 |
| 1 | 45 |  | 14 | 8 | 24 |  | 20 |  | 27 |
| 1 | 45 |  | 16 | 9 |  |  | 11 |  | 20 |
| 1 | 44 |  | 18 | 10 |  | 53 | 2 |  | 12 |
| 1 | 44 |  | 20 | 11 |  | 52 | 53 | 44 | 5 |
| 1 | 44 |  | 22 | 12 | 24 | 52 | 44 | 43 | 52 |
| 1 | 44 | 0 | 23 | 13 | 24 | 52 | 29 |  | 44 |
| 1 | 44 | 0 | 25 | 14 |  | 52 | 14 |  | 33 |
| 1 | 44 | 0 | 27 | 15 |  | 52 | 0 |  | 21 |
|  | 43 |  | 29 | 16 |  | 51 | 46 | 43 | 9 |
|  | 43 |  | 31 | 17 |  | 51 | 32 | 42 | 57 |
|  | 43 |  | 33 | 18 |  | 51 | 18 |  | 44 |
|  | 43 |  | 35 | 19 |  | 50 | 57 |  | 27 |
|  | 42 |  | 36 | 20 |  | 50 | 36 | 42 | 9 |
|  | 42 |  | 38 | 21 |  | 50 | 14 | 41 | 51 |
|  | 41 |  | 40 | 22 |  | 49 | 52 | 41 | 33 |
| 1 | 41 |  | 42 | 23 | 24 | 49 | 30 | 41 | 14 |
| 1 | 40 |  | 44 | 24 | 24 | 49 | 8 | 40 | 57 |
| 1 | 40 |  | 46 | 25 | 20 | 48 | 45 | 40 | 38 |
| 1 | 39 |  | 48 | 26 | 16 | 48 | 22 | 40 | 18 |
| 1 | 39 |  | 49 | 27 | 12 | 47 | 59 | 39 | 59 |
|  | 38 |  | 51 | 28 | 8 | 47 | 35 |  | 39 |
|  | 37 |  | 53 | 29 | 4 | 47 | 12 |  | 20 |
|  | 36 | 0 | 55 | 30 | 0 | 46 | 48 | 39 | 0 |
|  | 35 | 0 | 57 | 30 | 52 | 46 | 16 | 38 | 33 |
|  | 34 | 0 | 59 | 31 | 44 | 45 | 44 | 38 | 6 |
|  | 33 | 1 | 0 | 32 | 36 | 45 | 12 | 37 | 39 |
|  | 32 | 1 | 2 | 33 | 28 | 44 | 39 | 37 | 12 |
|  | 31 | 1 | 4 | 34 | 20 | 44 | 7 | 36 | 44 |
|  | 30 | 1 | 6 | 35 | 12 | 43 | 32 | 36 | 18 |
|  | 29 | 1 | 7 | 36 | 0 | 42 | 58 | 35 | 48 |
|  | 28 | 1 | 9 | 36 | 48 | 42 | 22 | 35 | 18 |
|  | 27 | 1 | 11 | 37 | 36 | 41 | 46 | 34 | 48 |
|  | 26 | 1 | 13 | 38 | 24 | 41 | 10 | 34 | 18 |
| 1 | 25 | 1 | 14 | 39 | 12 | 40 | 32 | 33 | 48 |
| 1 | 23 | 1 | 17 | 40 | 0 | 39 | 58 | 33 | 18 |
| 1 | 22 | 1 | 19 | 40 | 44 | 39 | 18 | 32 | 44 |
| 1 | 20 | 1 | 20 | 41 | 28 | 38 | 39 | 32 | 12 |
| 1 | 19 | 1 | 22 | 42 | 12 | 37 | 59 | 31 | 39 |

## Veneris

| | Declinacio | | Reflexio | | M. ad declinacionem | | M. ad reflexionem | | Arcus descensus | |
|---|---|---|---|---|---|---|---|---|---|---|
| G | G | M | G | M | M | 2 | M | 2 | M | 2 |
| 46 | 0 | 48 | 1 | 3 | 42 | 56 | 41 | 26 | 6 | 55 |
| 47 | 0 | 47 | 1 | 4 | 43 | 40 | 40 | 44 | 6 | 48 |
| 48 | 0 | 46 | 1 | 5 | 44 | 24 | 40 | 0 | | 40 |
| 49 | 0 | 46 | 1 | 6 | 45 | 4 | 39 | 12 | | 32 |
| 50 | | 44 | 1 | 8 | 45 | 44 | 38 | 24 | 6 | 24 |
| 51 | | 44 | 1 | 9 | 46 | 24 | 37 | 36 | | 16 |
| 52 | | 43 | 1 | 11 | 47 | 4 | 36 | 48 | 6 | 8 |
| 53 | | 42 | | 12 | 47 | 44 | 36 | 12 | 6 | 0 |
| 54 | | 41 | | 13 | 48 | 24 | 35 | 20 | 5 | 52 |
| 55 | | 41 | | 14 | 49 | 0 | 34 | 28 | 5 | 48 |
| 56 | | 40 | | 16 | 49 | 36 | 33 | 36 | | 36 |
| 57 | | 39 | | 17 | 50 | 12 | 32 | 44 | | 27 |
| 58 | | 38 | | 18 | 50 | 48 | 31 | 52 | 5 | 18 |
| 59 | | 37 | | 19 | 51 | 24 | 30 | 0 | | 9 |
| 60 | | 36 | | 20 | 52 | 0 | 30 | 4 | 5 | 0 |
| 61 | | 35 | | 22 | 52 | 26 | 29 | 8 | 4 | 51 |
| 62 | 0 | 34 | | 23 | 52 | 52 | 28 | 12 | 4 | 42 |
| 63 | 0 | 33 | | 24 | 53 | 18 | 27 | 16 | | 33 |
| 64 | 0 | 32 | 1 | 25 | 53 | 44 | 26 | 40 | | 24 |
| 65 | 0 | 30 | 1 | 27 | 54 | 10 | 25 | 24 | 4 | 14 |
| 66 | 0 | 29 | 1 | 28 | 54 | 36 | 24 | 24 | 4 | 4 |
| 67 | | 28 | 1 | 29 | 55 | 0 | 23 | 24 | 3 | 54 |
| 68 | | 27 | 1 | 31 | 55 | 24 | 22 | 24 | 3 | 44 |
| 69 | | 26 | 1 | 32 | 55 | 48 | 21 | 24 | | 34 |
| 70 | | 25 | 1 | 33 | 56 | 12 | 20 | 24 | | 24 |
| 71 | | 24 | | 34 | 56 | 36 | 19 | 24 | | 14 |
| 72 | | 23 | | 35 | 57 | 0 | 18 | 24 | 3 | 4 |
| 73 | | 22 | | 37 | 57 | 16 | 17 | 24 | 2 | 54 |
| 74 | 0 | 21 | | 38 | 57 | 32 | 16 | 24 | 2 | 44 |
| 75 | 0 | 20 | | 39 | 57 | 48 | 15 | 24 | | 34 |
| 76 | 0 | 19 | | 40 | 58 | 4 | 14 | 24 | | 24 |
| 77 | 0 | 18 | | 41 | 58 | 20 | 13 | 24 | 2 | 14 |
| 78 | 0 | 16 | | 43 | 58 | 36 | 12 | 24 | 2 | 4 |
| 79 | 0 | 15 | | 44 | 58 | 46 | 11 | 24 | 1 | 54 |
| 80 | 0 | 14 | | 45 | 58 | 56 | 10 | 24 | 1 | 44 |
| 81 | 0 | 13 | | 47 | 59 | 6 | 9 | 24 | 1 | 34 |
| 82 | 0 | 12 | | 48 | 59 | 16 | 8 | 24 | 1 | 24 |
| 83 | 0 | 10 | | 49 | 59 | 26 | 7 | 24 | 1 | 14 |
| 84 | 0 | 8 | | 50 | 59 | 36 | 6 | 24 | 1 | 4 |
| 85 | 0 | 7 | | 51 | 59 | 40 | 5 | 20 | 0 | 54 |
| 86 | 0 | 5 | | 52 | 59 | 44 | 4 | 16 | 0 | 44 |
| 87 | 0 | 4 | 1 | 53 | 59 | 48 | 3 | 12 | 0 | 34 |
| 88 | 0 | 3 | 1 | 54 | 59 | 52 | 2 | 8 | 0 | 22 |
| 89 | 0 | 2 | 1 | 55 | 59 | 56 | 1 | 4 | 0 | 11 |
| 90 | 0 | 0 | 1 | 57 | 60 | 0 | 0 | 0 | 0 | 0 |

## Mercurij

| Declinacio | | Reflexio | | M. ad declinacionem | | M. ad reflexionem | | Subtus Ascensus | |
|---|---|---|---|---|---|---|---|---|---|
| G | M | G | M | M | 2 | M | 2 | M | 2 |
| 1 | 17 | 1 | 23 | 42 | 46 | 37 | 20 | 31 | 6 |
| 1 | 16 | 1 | 24 | 43 | 40 | 36 | 40 | 30 | 33 |
| 1 | 15 | 1 | 26 | 44 | 24 | 36 | 0 | 30 | 0 |
| 1 | 14 | 1 | 27 | 45 | 4 | 35 | 16 | 29 | 24 |
| 1 | 13 | | 29 | 45 | 44 | 34 | 33 | 28 | 48 |
| 1 | 12 | | 30 | 46 | 24 | 33 | 47 | 28 | 12 |
| 1 | 11 | | 32 | 47 | 4 | 33 | 7 | 27 | 36 |
| 1 | 10 | | 33 | 47 | 44 | 32 | 44 | 27 | 0 |
| 1 | 8 | | 34 | 48 | 24 | 31 | 41 | 26 | 24 |
| 1 | 7 | | 36 | 49 | 0 | 30 | 47 | 25 | 44 |
| 1 | 5 | | 37 | 49 | 36 | 30 | 7 | 24 | 6 |
| 1 | 3 | 1 | 39 | 50 | 12 | 29 | 20 | 24 | 27 |
| 1 | 2 | 1 | 41 | 50 | 48 | 28 | 33 | 23 | 48 |
| 1 | 0 | 1 | 43 | 51 | 24 | 27 | 46 | 23 | 9 |
| 0 | 59 | | 44 | 52 | 0 | 27 | 0 | 22 | 30 |
| 0 | 58 | | 45 | 52 | 26 | 26 | 8 | 21 | 48 |
| 0 | 56 | | 47 | 52 | 52 | 25 | 18 | 21 | 6 |
| 0 | 55 | | 48 | 53 | 18 | 24 | 29 | 20 | 24 |
| 0 | 53 | | 49 | 53 | 44 | 23 | 38 | 19 | 42 |
| 0 | 51 | | 50 | 54 | 0 | 22 | 48 | 19 | 0 |
| 0 | 49 | | 52 | 54 | 36 | 21 | 58 | 18 | 18 |
| 0 | 48 | 1 | 53 | 55 | 0 | 21 | 4 | 17 | 33 |
| 0 | 46 | 1 | 54 | 55 | 24 | 20 | 10 | 16 | 48 |
| 0 | 44 | 1 | 56 | 55 | 48 | 19 | 16 | 16 | 3 |
| 0 | 42 | 1 | 57 | 56 | 12 | 18 | 22 | 15 | 18 |
| 0 | 40 | 1 | 58 | 56 | 36 | 17 | 28 | 14 | 33 |
| 0 | 38 | 2 | 0 | 57 | 0 | 16 | 34 | 13 | 48 |
| 0 | 36 | 2 | 1 | 57 | 16 | 15 | 40 | 13 | 3 |
| 0 | 34 | | 3 | 57 | 32 | 14 | 46 | 12 | 18 |
| 0 | 32 | | 4 | 57 | 48 | 13 | 52 | 11 | 33 |
| 0 | 30 | | 5 | 58 | 4 | 12 | 54 | 10 | 48 |
| 0 | 28 | | 6 | 58 | 20 | 12 | 4 | 10 | 3 |
| 0 | 26 | | 7 | 58 | 36 | 11 | 10 | 9 | 18 |
| 0 | 24 | | 8 | 58 | 46 | 10 | 16 | 8 | 33 |
| 0 | 22 | 2 | 9 | 58 | 56 | 9 | 22 | 7 | 48 |
| 0 | 20 | 2 | 11 | 59 | 6 | 8 | 28 | 7 | 3 |
| 0 | 19 | | 12 | 59 | 16 | 7 | 34 | 6 | 18 |
| 0 | 17 | | 13 | 59 | 26 | 6 | 40 | 5 | 33 |
| 0 | 16 | | 14 | 59 | 36 | 5 | 46 | 4 | 48 |
| 0 | 14 | | 15 | 59 | 40 | 4 | 40 | 4 | 0 |
| 0 | 12 | | 16 | 59 | 48 | 3 | 52 | 3 | 12 |
| 0 | 9 | | 17 | 59 | 48 | 2 | 54 | 2 | 24 |
| 0 | 6 | 2 | 18 | 59 | 52 | 1 | 56 | 1 | 36 |
| 0 | 3 | 2 | 19 | 59 | 56 | 0 | 58 | 0 | 48 |
| 0 | 0 | 2 | 20 | 60 | 0 | 0 | 0 | 0 | 0 |

38

## Veneris

| | Declinacio | | Reflexio | | Minuta ad declinacionem | | Minuta ad reflexionem | | Septentrionalis Ascendens | |
|---|---|---|---|---|---|---|---|---|---|---|
| G | G | m | G | m | m | 2 | m | 2 | m | 2 |
| 91 | 0 | 1 | 1 | 58 | 59 | 56 | 1 | 4 | 0 | 11 |
| 92 | 0 | 2 | 1 | 59 | 59 | 52 | 2 | 8 | 0 | 22 |
| 93 | 0 | 4 | 2 | 0 | 59 | 48 | 3 | 12 | 0 | 33 |
| 94 | 0 | 6 | 2 | 1 | 59 | 44 | 4 | 16 | 0 | 44 |
| 95 | | 8 | 2 | 2 | 59 | 40 | 5 | 20 | 0 | 54 |
| 96 | | 10 | 2 | 3 | 59 | 36 | 6 | 24 | 1 | 4 |
| 97 | | 11 | 2 | 4 | 59 | 26 | 7 | 24 | 1 | 14 |
| 98 | | 13 | 2 | 5 | 59 | 16 | 8 | | 1 | 24 |
| 99 | | 15 | | 6 | 59 | 6 | 9 | | 1 | 34 |
| 100 | | 16 | | 7 | 58 | 56 | 10 | | 1 | 44 |
| 101 | | 18 | | 8 | | 46 | 11 | | 1 | 54 |
| 102 | | 20 | | 9 | | 36 | 12 | | 2 | 4 |
| 103 | 0 | 22 | | 10 | | 26 | 13 | | 2 | 14 |
| 104 | 0 | 24 | | 11 | 58 | 4 | 14 | | 2 | 24 |
| 105 | 0 | 26 | | 12 | 57 | 48 | 15 | | 2 | 34 |
| 106 | 0 | 28 | | 13 | | 32 | 16 | 24 | 2 | 44 |
| 107 | | 30 | | 14 | | 16 | 17 | 24 | 2 | 54 |
| 108 | | 32 | | 15 | 57 | 0 | 18 | | 3 | 4 |
| 109 | | 34 | 2 | 16 | 56 | 36 | 19 | | 3 | 14 |
| 110 | | 36 | 2 | 17 | 56 | 12 | 20 | | 3 | 24 |
| 111 | | 38 | 2 | 18 | 55 | 48 | 21 | | 3 | 34 |
| 112 | | 40 | 2 | 19 | 55 | 24 | 22 | | 3 | 44 |
| 113 | | 42 | 2 | 20 | 55 | 0 | 23 | 24 | 3 | 54 |
| 114 | | 45 | 2 | 20 | 54 | 36 | 24 | 24 | 4 | 4 |
| 115 | | 47 | 2 | 21 | 54 | 10 | 25 | 20 | 4 | 14 |
| 116 | | 49 | | 22 | 53 | 44 | 26 | 16 | 4 | 24 |
| 117 | | 52 | | 23 | 53 | 16 | 27 | 12 | 4 | 34 |
| 118 | 0 | 54 | | 24 | 52 | 52 | 28 | 8 | 4 | 44 |
| 119 | 0 | 56 | | 25 | 52 | 26 | 29 | 4 | 4 | 54 |
| 120 | 0 | 59 | | 25 | 52 | 0 | 30 | 0 | 5 | 4 |
| 121 | 1 | 2 | | 25 | 51 | 24 | 30 | 52 | 5 | 9 |
| 122 | 1 | 5 | | 26 | 50 | 48 | 31 | 54 | 5 | 18 |
| 123 | 1 | 7 | | 26 | 50 | 12 | 32 | 36 | 5 | 26 |
| 124 | 1 | 9 | | 27 | 49 | 36 | 33 | 28 | 5 | 34 |
| 125 | 1 | 11 | | 27 | 49 | 0 | 34 | 20 | 5 | 43 |
| 126 | 1 | 13 | | 28 | 48 | 24 | 35 | 12 | 5 | 52 |
| 127 | 1 | 16 | | 28 | 47 | 44 | 36 | 0 | 6 | 0 |
| 128 | 1 | 19 | | 29 | 47 | 4 | 36 | 40 | 6 | 8 |
| 129 | 1 | 22 | | 29 | 46 | 24 | 37 | 36 | 6 | 16 |
| 130 | 1 | 25 | 2 | 29 | 45 | 44 | 38 | 24 | 6 | 24 |
| 131 | 1 | 29 | 2 | 30 | 45 | 4 | 39 | 12 | 6 | 32 |
| 132 | 1 | 33 | 2 | 30 | 44 | 24 | 40 | 0 | 6 | 40 |
| 133 | 1 | 37 | 2 | 30 | 43 | 40 | 40 | 44 | 6 | 48 |
| 134 | 1 | 41 | 2 | 30 | 42 | 56 | 41 | 28 | 6 | 56 |
| 135 | 1 | 45 | 2 | 30 | 42 | 12 | 42 | 12 | 7 | 3 |

## Mercurij

| Declinacio | | Reflexio | | Minuta ad declinacionem | | Minuta ad reflexionem | | Meridionalis descendens | |
|---|---|---|---|---|---|---|---|---|---|
| G | m | G | m | m | 2 | m | 2 | m | 2 |
| 0 | 2 | 2 | 21 | 59 | 56 | 1 | 10 | 0 | 28 |
| 0 | 5 | 2 | 22 | 59 | 52 | 2 | 20 | 1 | 36 |
| 0 | 7 | 2 | 23 | 59 | 48 | 3 | 30 | 2 | 24 |
| | 10 | 2 | 24 | 59 | 44 | 4 | 40 | 3 | 12 |
| | 12 | 2 | 25 | 59 | 40 | 5 | 51 | 4 | 0 |
| | 14 | | 26 | 59 | 36 | 7 | 2 | 4 | 48 |
| | 17 | | 26 | 59 | 26 | 8 | 8 | 5 | 33 |
| | 19 | | 26 | 59 | 16 | 9 | 14 | 6 | 18 |
| | 22 | | 26 | 59 | 6 | 10 | 20 | 7 | 3 |
| | 24 | | 27 | 58 | 16 | 11 | 26 | 7 | 48 |
| 0 | 28 | | 28 | 58 | 26 | 12 | 32 | 8 | 33 |
| 0 | 31 | | 28 | 58 | 36 | 13 | 38 | 9 | 18 |
| 0 | 33 | | 28 | 58 | 20 | 14 | 44 | 10 | 3 |
| 0 | 36 | | 28 | 58 | 4 | 15 | 50 | 10 | 48 |
| | 39 | | 28 | 57 | 48 | 16 | 56 | 11 | 33 |
| | 42 | | 29 | 57 | 32 | 18 | 2 | 12 | 18 |
| | 44 | | 29 | 57 | 16 | 19 | 8 | 13 | 3 |
| | 48 | | 29 | 57 | 0 | 20 | 14 | 13 | 48 |
| 0 | 51 | | 29 | 56 | 36 | 21 | 20 | 14 | 33 |
| 0 | 54 | | 29 | 56 | 12 | 22 | 26 | 15 | 18 |
| 0 | 57 | | 29 | 55 | 48 | 23 | 32 | 16 | 3 |
| 1 | 0 | | 30 | 55 | 24 | 24 | 38 | 16 | 48 |
| 1 | 3 | | 30 | 55 | 0 | 25 | 44 | 17 | 33 |
| 1 | 6 | | 30 | 54 | 36 | 26 | 50 | 18 | 18 |
| 1 | 9 | | 30 | 54 | 10 | 27 | 52 | 19 | 0 |
| 1 | 12 | 2 | 30 | 53 | 44 | 28 | 54 | 19 | 42 |
| 1 | 15 | 2 | 30 | 53 | 18 | 29 | 55 | 20 | 24 |
| | 18 | 2 | 29 | 52 | 44 | 30 | 57 | 21 | 6 |
| | 21 | 2 | 29 | 52 | 26 | 31 | 58 | 21 | 48 |
| | 24 | 2 | 29 | 52 | 0 | 33 | 0 | 22 | 30 |
| | 28 | 2 | 28 | 51 | 24 | 33 | 58 | 23 | 0 |
| | 31 | | 28 | 50 | 48 | 34 | 55 | 23 | 48 |
| | 34 | | 27 | 50 | 12 | 35 | 53 | 24 | 27 |
| | 37 | | 27 | 49 | 36 | 36 | 51 | 25 | 6 |
| | 41 | | 26 | 49 | 0 | 37 | 46 | 25 | 45 |
| | 44 | | 26 | 48 | 24 | 38 | 43 | 26 | 24 |
| 1 | 49 | | 26 | 47 | 44 | 39 | 36 | 27 | 4 |
| 1 | 53 | | 25 | 47 | 4 | 40 | 29 | 27 | 36 |
| 1 | 57 | | 24 | 46 | 24 | 41 | 22 | 28 | 12 |
| 2 | 0 | 2 | 23 | 45 | 44 | 42 | 14 | 28 | 48 |
| 2 | 3 | 2 | 22 | 45 | 4 | 43 | 8 | 29 | 24 |
| 2 | 6 | 2 | 21 | 44 | 24 | 44 | 0 | 30 | 0 |
| 2 | 10 | 2 | 20 | 43 | 40 | 44 | 49 | 30 | 33 |
| 2 | 13 | 2 | 19 | 42 | 56 | 45 | 8 | 31 | 6 |
| 2 | 17 | 2 | 17 | 42 | 12 | 46 | 26 | 31 | 39 |

| | Veneris | | | | | | | | | | Mercurii | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Declinatio | | Reflexio | | M. ad declinationem | | M. ad reflexionem | | Minuta ascensus | | Declinatio | | Reflexio | | M. ad declinationem | | M. ad reflexionem | | Minuta descensus | |
| G | g | m | g | m | m | 2 | m | 2 | m | 2 | g | m | g | m | m | 2 | m | 2 | m | 2 |
| 136 | 1 | 49 | 2 | 30 | 41 | 28 | 42 | 56 | 7 | 10 | 2 | 20 | 2 | 14 | 41 | 28 | 47 | 14 | 32 | 12 |
| 137 | 1 | 54 | 2 | 30 | 40 | 44 | 43 | 40 | 7 | 17 | 2 | 23 | 2 | 13 | 40 | 44 | 48 | 2 | 32 | 44 |
| 138 | 1 | 59 | 2 | 30 | 40 | 0 | 44 | 24 | 7 | 24 | 2 | 26 | 2 | 11 | 40 | 0 | 48 | 40 | 33 | 18 |
| 139 | 2 | 3 | 2 | 30 | 39 | 12 | 45 | 4 | 7 | 31 | 2 | 30 | 2 | 10 | 39 | 12 | 49 | 34 | 33 | 48 |
| 140 | 2 | 7 | 2 | 29 | 38 | 24 | 45 | 44 | 7 | 38 | 2 | 33 | 2 | 8 | 38 | 24 | 50 | 18 | 34 | 18 |
| 141 | 2 | 11 | | 29 | 37 | 36 | 46 | 24 | 7 | 45 | 2 | 37 | 2 | 6 | 37 | 36 | 51 | 2 | 34 | 48 |
| 142 | 2 | 14 | | 29 | 36 | 48 | 47 | 4 | 7 | 52 | 2 | 41 | 2 | 4 | 36 | 48 | 51 | 56 | 35 | 18 |
| 143 | | 19 | | 28 | 36 | 0 | 47 | 44 | 7 | 58 | 2 | 44 | 2 | 2 | 36 | 0 | 52 | 30 | 35 | 48 |
| 144 | | 23 | | 28 | 35 | 12 | 48 | 24 | 8 | 4 | 2 | 47 | 2 | 0 | 35 | 12 | 53 | 14 | 36 | 18 |
| 145 | | 29 | | 27 | 34 | 20 | 49 | 0 | 8 | 10 | 2 | 51 | 1 | 58 | 34 | 20 | 53 | 54 | 36 | 44 |
| 146 | | 35 | | 26 | 33 | 28 | 49 | 36 | 8 | 16 | 2 | 54 | 1 | 56 | 33 | 28 | 54 | 33 | 37 | 12 |
| 147 | | 42 | 2 | 25 | 32 | 36 | 50 | 12 | 8 | 22 | 2 | 57 | 1 | 54 | 32 | 36 | 55 | 13 | 37 | 39 |
| 148 | | 49 | 2 | 24 | 31 | 29 | 50 | 48 | 8 | 28 | 3 | 1 | 1 | 51 | 31 | 44 | 55 | 53 | 38 | 6 |
| 149 | 2 | 56 | 2 | 23 | 30 | 52 | 51 | 24 | 8 | 34 | 3 | 4 | 1 | 48 | 30 | 52 | 56 | 33 | 38 | 33 |
| 150 | 3 | 3 | 2 | 22 | 30 | 0 | 52 | 0 | 8 | 40 | 3 | 7 | 1 | 45 | 30 | 0 | 57 | 12 | 39 | 0 |
| 151 | 3 | 10 | 2 | 21 | 29 | 4 | 52 | 26 | 8 | 45 | 3 | 11 | 1 | 42 | 29 | 4 | 57 | 41 | 39 | 20 |
| 152 | | 17 | | 20 | 28 | 8 | 52 | 52 | 8 | 50 | 3 | 14 | 1 | 39 | 28 | 8 | 58 | 10 | 39 | 40 |
| 153 | | 24 | | 19 | 27 | 12 | 53 | 18 | 8 | 54 | 3 | 17 | 1 | 36 | 27 | 12 | 58 | 39 | 40 | 0 |
| 154 | | 31 | | 16 | 26 | 16 | 53 | 44 | 8 | 58 | 3 | 20 | 1 | 34 | 26 | 16 | 59 | 7 | 40 | 19 |
| 155 | | 38 | | 14 | 25 | 20 | 54 | 10 | 9 | 2 | 3 | 23 | 1 | 32 | 25 | 20 | 59 | 36 | 40 | 38 |
| 156 | | 44 | | 12 | 24 | 24 | 54 | 36 | 9 | 6 | 3 | 26 | 1 | 29 | 24 | 24 | 60 | 4 | 40 | 57 |
| 157 | 3 | 51 | | 10 | 23 | 24 | 55 | 0 | 9 | 10 | 3 | 29 | 1 | 26 | 23 | 24 | 60 | 31 | 41 | 15 |
| 158 | 3 | 58 | | 7 | 22 | 24 | 55 | 24 | 9 | 14 | 3 | 32 | 1 | 23 | 22 | 24 | 60 | 48 | 41 | 33 |
| 159 | 4 | 5 | 2 | 4 | 21 | | 56 | 48 | 9 | 18 | 3 | 34 | 1 | 20 | 21 | 24 | 61 | 24 | 41 | 51 |
| 160 | 4 | 12 | 2 | 1 | 20 | | 56 | 12 | 9 | 22 | 3 | 38 | 1 | 17 | 20 | 24 | 61 | 40 | 42 | 9 |
| 161 | 4 | 19 | 2 | 58 | 19 | | 56 | 36 | 9 | 26 | 3 | 40 | 1 | 14 | 19 | | 62 | 16 | 42 | 27 |
| 162 | | 26 | 1 | 55 | 18 | | 57 | 0 | 9 | 36 | 3 | 42 | 1 | 10 | 18 | | 62 | 42 | 42 | 44 |
| 163 | | 33 | 1 | 51 | 17 | 24 | 57 | 16 | 9 | 33 | 3 | 44 | 1 | 7 | 17 | | 63 | 0 | 42 | 47 |
| 164 | | 41 | 1 | 47 | 16 | 24 | 57 | 32 | 9 | 36 | 3 | 46 | 1 | 4 | 16 | | 63 | 18 | 43 | 9 |
| 165 | | 49 | 1 | 42 | 15 | 24 | 58 | 48 | 9 | 39 | 3 | 48 | 1 | 0 | 15 | | 63 | 36 | 43 | 21 |
| 166 | 4 | 57 | | 37 | 14 | | 58 | 4 | 9 | 42 | 3 | 50 | 0 | 56 | 14 | | 63 | 53 | 43 | 33 |
| 167 | 5 | 5 | | 32 | 13 | | 58 | 20 | 9 | 44 | 3 | 52 | 0 | 52 | 13 | | 64 | 11 | 43 | 44 |
| 168 | | 13 | | 27 | 12 | | 58 | 36 | 9 | 46 | 3 | 54 | 0 | 48 | 12 | | 64 | 28 | 43 | 47 |
| 169 | | 22 | | 21 | 11 | | 58 | 46 | 9 | 48 | 3 | 56 | 0 | 44 | 11 | | 64 | 39 | 44 | 4 |
| 170 | | 33 | | 14 | 10 | | 59 | 56 | 9 | 50 | 3 | 58 | 0 | 40 | 10 | | 64 | 40 | 44 | 13 |
| 171 | | 42 | | 9 | 9 | | 59 | 6 | 9 | 52 | 3 | 59 | 0 | 36 | 9 | | 64 | 1 | 44 | 21 |
| 172 | 5 | 52 | 1 | 4 | 8 | 24 | 59 | 16 | 9 | 54 | 4 | 0 | 0 | 32 | 8 | | 64 | 12 | 44 | 28 |
| 173 | 6 | 2 | 0 | 55 | 7 | 24 | | 26 | 9 | 55 | 4 | 1 | 0 | 28 | 7 | 24 | 64 | 22 | 44 | 35 |
| 174 | 6 | 10 | 0 | 48 | 6 | 24 | | 36 | 9 | 56 | 4 | 2 | 0 | 24 | 6 | 24 | 64 | 34 | 44 | 42 |
| 175 | 6 | 23 | 0 | 40 | 5 | 20 | 59 | 40 | 9 | 57 | 4 | 2 | 0 | 20 | 5 | 20 | 64 | 39 | 44 | 45 |
| 176 | 6 | 34 | 0 | 32 | 4 | 16 | 59 | 44 | 9 | 57 | 4 | 3 | 0 | 16 | 4 | 16 | 64 | 44 | 44 | 48 |
| 177 | 6 | 46 | 0 | 24 | 3 | 12 | | 48 | 9 | 58 | 4 | 3 | 0 | 12 | 3 | 12 | 64 | 48 | 44 | 51 |
| 178 | 6 | 58 | 0 | 16 | 2 | 8 | 59 | 52 | 9 | 58 | 4 | 3 | 0 | 8 | 2 | 8 | 64 | 52 | 44 | 54 |
| 179 | 7 | 10 | 0 | 8 | 1 | 4 | 59 | 56 | 9 | 59 | 4 | 4 | 0 | 4 | 1 | 4 | 64 | 56 | 44 | 57 |
| 180 | 7 | 22 | 0 | 0 | 0 | 0 | 60 | 0 | 9 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 63 | 0 | 44 | 0 |

## Veneris

| S | Declinatio G | m | Reflexio G | m | M. ad declinationem m | 2 | M. ad reflexionem m | 2 | Sept. desiderii m | 2 |
|---|---|---|---|---|---|---|---|---|---|---|
| 181 | 6 | 10 | 0 | 8 | 1 | 4 | 59 | 56 | 9 | 59 |
| 182 | 6 | 58 | 0 | 16 | 2 | 8 | 59 | 52 | 9 | 58 |
| 183 | | 46 | 0 | 24 | 3 | 12 | | 48 | | 58 |
| 184 | | 34 | 0 | 32 | 4 | 16 | | 44 | | 57 |
| 185 | | 23 | 0 | 40 | 5 | 20 | 59 | 40 | | 57 |
| 186 | | 12 | 0 | 48 | 6 | 24 | | 36 | | 56 |
| 187 | 6 | 2 | 0 | 55 | 7 | 24 | | 26 | | 55 |
| 188 | 5 | 52 | 1 | 2 | 8 | 24 | 59 | 16 | | 54 |
| 189 | 5 | 42 | 1 | 9 | 9 | 24 | 59 | 6 | | 52 |
| 190 | | 32 | 1 | 15 | 10 | 24 | 58 | 56 | | 50 |
| 191 | | 22 | 1 | 21 | 11 | 24 | | 46 | 9 | 48 |
| 192 | 5 | 13 | 1 | 27 | 12 | 24 | 58 | 36 | 9 | 46 |
| 193 | 5 | 5 | 1 | 32 | 13 | 24 | | 20 | 9 | 44 |
| 194 | 4 | 57 | 1 | 37 | 14 | 24 | 58 | 4 | | 42 |
| 195 | 4 | 49 | 1 | 42 | 15 | 24 | 57 | 48 | | 39 |
| 196 | | 41 | 1 | 47 | 16 | 24 | | 32 | | 36 |
| 197 | | 33 | 1 | 51 | 17 | 24 | | 16 | | 33 |
| 198 | | 21 | 1 | 55 | 18 | 24 | 57 | 0 | | 30 |
| 199 | | 19 | 1 | 58 | 19 | 24 | 56 | 36 | | 36 |
| 200 | 4 | 12 | 2 | 1 | 20 | 24 | 56 | 12 | | 32 |
| 201 | 4 | 5 | 2 | 4 | 21 | 24 | 55 | 48 | | 18 |
| 202 | 3 | 58 | 2 | 7 | 22 | 24 | | 24 | | 14 |
| 203 | 3 | 50 | 2 | 10 | 23 | 24 | 55 | 0 | | 12 |
| 204 | | 44 | 2 | 12 | 24 | 24 | 54 | 36 | 9 | 6 |
| 205 | | 38 | 2 | 14 | 25 | 20 | 54 | 10 | 9 | 9 |
| 206 | | 31 | 2 | 16 | 26 | 16 | 53 | 44 | 8 | 58 |
| 207 | | 24 | 2 | 18 | 27 | 12 | 53 | 18 | 8 | 44 |
| 208 | | 17 | 2 | 20 | 28 | 8 | 52 | 52 | | 50 |
| 209 | 3 | 10 | 2 | 21 | 29 | 4 | | 26 | | 45 |
| 210 | 3 | 3 | 2 | 22 | 30 | 0 | 52 | 0 | | 40 |
| 211 | 2 | 56 | 2 | 23 | 30 | 52 | 51 | 24 | 8 | 34 |
| 212 | 2 | 49 | 2 | 24 | 31 | 44 | 50 | 48 | | 28 |
| 213 | | 43 | 2 | 25 | 32 | 36 | 50 | 12 | | 22 |
| 214 | | 35 | | 26 | 33 | 28 | 49 | 36 | | 16 |
| 215 | | 29 | | 27 | 34 | 20 | 49 | 0 | 8 | 10 |
| 216 | 2 | 23 | | 28 | 35 | 12 | 48 | 24 | 8 | 4 |
| 217 | 2 | 19 | 2 | 28 | 36 | 0 | 47 | 44 | 7 | 58 |
| 218 | | 14 | 2 | 28 | 36 | 48 | 47 | 4 | 7 | 52 |
| 219 | | 11 | 2 | 29 | 37 | 36 | 46 | 24 | | 45 |
| 220 | 2 | 7 | | 29 | 38 | 24 | 45 | 44 | | 38 |
| 221 | 2 | 3 | | 30 | 39 | 12 | 45 | 4 | 7 | 31 |
| 222 | 1 | 59 | | 30 | 40 | 0 | 44 | 24 | | 24 |
| 223 | 1 | 54 | 2 | 30 | 40 | 44 | 43 | 40 | | 17 |
| 224 | 1 | 49 | 2 | 30 | 41 | 28 | 42 | 56 | 7 | 10 |
| 225 | 1 | 45 | 2 | 30 | 42 | 12 | 42 | 12 | 7 | 3 |

## Mercurii

| Declinatio G | m | Reflexio G | m | M. ad declinationes m | 2 | M. ad reflexionem m | 2 | Merc. astens m | 2 |
|---|---|---|---|---|---|---|---|---|---|
| 4 | 4 | 0 | 4 | 1 | 4 | 65 | 56 | 44 | 57 |
| 4 | 3 | 0 | 8 | 2 | 8 | 65 | 52 | 44 | 54 |
| | 3 | 0 | 12 | 3 | 12 | 65 | 48 | 44 | 51 |
| | 3 | 0 | 16 | 4 | 16 | 65 | 44 | 44 | 48 |
| 4 | 2 | 0 | 20 | 5 | 20 | 65 | 40 | 44 | 45 |
| | 2 | 0 | 24 | 6 | 24 | 65 | 34 | 44 | 42 |
| 4 | 1 | 0 | 28 | 7 | 24 | 65 | 23 | 44 | 35 |
| 4 | 0 | 0 | 32 | 8 | | 65 | 12 | 44 | 28 |
| 3 | 59 | 0 | 36 | 9 | | 65 | 1 | 44 | 21 |
| 3 | 58 | 0 | 40 | 10 | | 64 | 50 | 44 | 13 |
| | 56 | 0 | 44 | 11 | | 64 | 29 | 44 | 5 |
| | 54 | 0 | 48 | 12 | | 64 | 28 | 43 | 57 |
| | 52 | 0 | 52 | 13 | | 64 | 11 | 43 | 45 |
| | 50 | 0 | 56 | 14 | | 63 | 53 | 43 | 33 |
| | 48 | 1 | 0 | 15 | 24 | 63 | 36 | 43 | 21 |
| | 46 | 1 | 4 | 16 | 24 | 63 | 18 | 43 | 9 |
| | 44 | 1 | 7 | 17 | | 63 | 0 | 42 | 57 |
| | 42 | 1 | 10 | 18 | | 62 | 42 | 42 | 44 |
| 3 | 40 | 1 | 14 | 19 | | 62 | 1 | 42 | 27 |
| 3 | 38 | 1 | 17 | 20 | | 61 | 40 | 42 | 9 |
| 3 | 35 | 1 | 20 | 21 | | 61 | 24 | 41 | 51 |
| | 32 | 1 | 23 | 22 | | 60 | 58 | 41 | 33 |
| | 29 | 1 | 26 | 23 | 24 | 60 | 31 | 41 | 14 |
| | 26 | 1 | 29 | 24 | 24 | 60 | 4 | 40 | 57 |
| | 23 | 1 | 32 | 25 | 20 | 59 | 36 | 40 | 38 |
| | 20 | 1 | 34 | 26 | 16 | 59 | 7 | 40 | 19 |
| | 17 | 1 | 36 | 27 | 12 | 58 | 39 | 40 | 0 |
| | 14 | 1 | 39 | 28 | 8 | 58 | 10 | 39 | 40 |
| | 11 | 1 | 42 | 29 | 4 | 57 | 41 | 39 | 20 |
| 3 | 7 | 1 | 44 | 30 | 0 | 57 | 12 | 39 | 0 |
| 3 | 4 | 1 | 48 | 30 | 42 | 56 | 33 | 38 | 33 |
| 3 | 1 | 1 | 51 | 31 | 44 | 55 | 53 | 38 | 6 |
| 2 | 57 | 1 | 54 | 32 | 36 | 55 | 13 | 37 | 39 |
| 2 | 54 | 1 | 56 | 33 | 28 | 54 | 33 | 37 | 12 |
| | 51 | 1 | 58 | 34 | 20 | 53 | 54 | 36 | 45 |
| | 47 | 2 | 0 | 35 | 12 | 53 | 14 | 36 | 18 |
| | 44 | 2 | 2 | 36 | 0 | 52 | 30 | 35 | 48 |
| 2 | 41 | 2 | 4 | 36 | 48 | 51 | 46 | 35 | 18 |
| 2 | 37 | 2 | 6 | 37 | 36 | 51 | 2 | 34 | 48 |
| | 33 | 2 | 8 | 38 | 24 | 50 | 18 | 34 | 18 |
| | 30 | 2 | 10 | 39 | 12 | 49 | 34 | 33 | 48 |
| | 26 | 2 | 11 | 40 | 0 | 48 | 50 | 33 | 18 |
| | 23 | 2 | 13 | 40 | 44 | 48 | 2 | 32 | 44 |
| 2 | 20 | 2 | 14 | 41 | 28 | 47 | 12 | 32 | 12 |
| 2 | 17 | 2 | 17 | 42 | 12 | 46 | 26 | 31 | 39 |

## Veneris

| | Declinacio | | Reflexio | | M ad declinacionem | | M ad reflexionem | | Ext descens | |
|---|---|---|---|---|---|---|---|---|---|---|
| G | G | M | G | M | M | S | M | S | M | S |
| 226 | 1 | 41 | 2 | 30 | 42 | 46 | 41 | 28 | 6 | 46 |
| 227 | 1 | 37 | 2 | 30 | 43 | 40 | 40 | 44 | 6 | 48 |
| 228 | 1 | 33 | 2 | 30 | 44 | 24 | 40 | 0 | 6 | 40 |
| 229 | 1 | 29 | 2 | 30 | 44 | 4 | 39 | 12 | | 32 |
| 230 | 1 | 25 | 2 | 29 | 44 | 44 | 38 | 24 | | 24 |
| 231 | 1 | 22 | 2 | 29 | 46 | [illegible] | 37 | 36 | | 6 |
| 232 | 1 | 19 | 2 | 29 | 47 | 4 | 36 | 48 | 6 | 8 |
| 233 | 1 | 16 | 2 | 28 | 47 | 44 | 36 | 0 | 6 | 0 |
| 234 | 1 | 13 | 2 | 28 | 48 | 24 | 35 | 12 | 5 | 42 |
| 235 | 1 | 11 | 2 | 27 | 49 | 0 | 34 | 20 | 5 | 43 |
| 236 | 1 | 9 | 2 | 27 | 49 | 36 | 33 | 28 | 5 | 34 |
| 237 | 1 | 7 | 2 | 26 | 50 | 12 | 32 | 36 | 5 | 26 |
| 238 | 1 | 5 | 2 | 26 | 50 | 48 | 31 | 44 | 5 | 18 |
| 239 | 1 | 2 | 2 | 24 | 51 | 24 | 30 | 52 | 5 | 9 |
| 240 | 0 | 59 | 2 | 24 | 52 | 0 | 30 | 0 | 5 | 0 |
| 241 | 0 | 56 | 2 | 24 | 52 | 26 | 29 | 4 | 4 | 51 |
| 242 | 0 | 54 | 2 | 24 | 52 | 52 | 28 | 8 | 4 | 44 |
| 243 | 0 | 52 | 2 | 23 | 53 | 18 | 27 | 12 | 4 | 33 |
| 244 | 0 | 49 | 2 | 22 | 53 | 44 | 26 | 16 | 4 | 24 |
| 245 | 0 | 47 | 2 | 21 | 54 | 10 | 25 | 20 | 4 | 14 |
| 246 | 0 | 44 | 2 | 20 | 54 | 36 | 24 | 24 | 4 | 4 |
| 247 | 0 | 42 | 2 | 20 | 55 | 0 | 23 | 24 | 3 | 54 |
| 248 | | 40 | 2 | 19 | 55 | 24 | 22 | 24 | 3 | 44 |
| 249 | | 38 | 2 | 18 | 55 | 48 | 21 | | 3 | 34 |
| 250 | | 36 | 2 | 17 | 56 | 12 | 20 | | 3 | 24 |
| 251 | | 34 | 2 | 16 | 56 | 36 | 19 | | 3 | 14 |
| 252 | | 32 | 2 | 15 | 57 | 0 | 18 | | 3 | 4 |
| 253 | | 30 | 2 | 14 | 57 | 16 | 17 | | 2 | 54 |
| 254 | | 28 | 2 | 13 | 57 | 32 | 16 | 24 | 2 | 44 |
| 255 | | 26 | 2 | 12 | 57 | 48 | 15 | 24 | 2 | 34 |
| 256 | 0 | 24 | 2 | 11 | 58 | 4 | 14 | | 2 | 24 |
| 257 | 0 | 22 | 2 | 10 | 58 | 20 | 13 | | 2 | 14 |
| 258 | 0 | 20 | 2 | 9 | 58 | 36 | 12 | | 2 | 4 |
| 259 | | 18 | 2 | 8 | 58 | 46 | 11 | | 1 | 54 |
| 260 | | 16 | 2 | 7 | 58 | 56 | 10 | | 1 | 44 |
| 261 | | 15 | 2 | 6 | 59 | 6 | 9 | | 1 | 34 |
| 262 | | 13 | 2 | 5 | 59 | 16 | 8 | 24 | 1 | 24 |
| 263 | | 11 | 2 | 4 | 59 | 26 | 7 | 24 | 1 | 14 |
| 264 | | 10 | 2 | 3 | 59 | 36 | 6 | 24 | 1 | 4 |
| 265 | | 8 | 2 | 2 | 59 | 40 | 5 | 20 | 0 | 54 |
| 266 | | 6 | 2 | 1 | 59 | 44 | 4 | 16 | 0 | 44 |
| 267 | | 4 | 2 | 0 | 59 | 44 | 3 | 12 | 0 | 33 |
| 268 | 0 | 2 | 1 | 59 | 59 | 52 | 2 | 8 | 0 | 22 |
| 269 | 0 | 1 | 1 | 58 | 59 | 56 | 1 | 4 | 0 | 11 |
| 270 | 0 | 0 | 1 | 57 | 60 | 0 | 0 | 0 | 0 | 0 |

## Mercurius

| Declinacio | | Reflexio | | M ad declinacionem | | M ad reflexionem | | M dil ascendens | |
|---|---|---|---|---|---|---|---|---|---|
| G | M | G | M | M | S | M | S | M | S |
| 2 | 13 | 2 | 19 | 43 | 46 | 45 | 38 | 21 | 6 |
| 2 | 10 | 2 | 20 | 43 | 40 | 44 | 39 | 30 | 32 |
| 2 | 6 | 2 | 22 | 44 | 44 | 44 | 0 | 30 | 0 |
| 2 | 3 | 2 | 22 | 45 | 4 | 43 | 8 | 29 | 24 |
| 2 | 0 | | 23 | 45 | 44 | 42 | 12 | 28 | 48 |
| 1 | 57 | | 24 | 46 | 24 | 41 | 22 | 28 | 12 |
| 1 | 53 | | 25 | 47 | 4 | 40 | 29 | 27 | 36 |
| 1 | 49 | | 26 | 47 | 44 | 39 | 36 | 27 | 0 |
| 1 | 45 | | 26 | 48 | 24 | 38 | 43 | 26 | 24 |
| 1 | 41 | | 26 | 49 | 0 | 37 | 46 | 25 | 44 |
| 1 | 37 | | 27 | 49 | 36 | 36 | 51 | 25 | 6 |
| 1 | 34 | | 27 | 50 | 12 | 35 | 53 | 24 | 27 |
| 1 | 31 | | 28 | 50 | 48 | 34 | 55 | 23 | 48 |
| | 28 | | 28 | 51 | 24 | 33 | 58 | 23 | 29 |
| | 25 | | 29 | 52 | 0 | 33 | 0 | 22 | 30 |
| | 21 | 2 | 29 | 52 | 26 | 31 | 58 | 21 | 48 |
| | 18 | 2 | 29 | 52 | 52 | 30 | 52 | 21 | 6 |
| | 15 | 2 | 30 | 53 | 18 | 29 | 55 | 20 | 24 |
| | 12 | 2 | 30 | 53 | 44 | 28 | 54 | 19 | 42 |
| | 9 | 2 | 30 | 54 | 10 | 27 | 52 | 19 | 0 |
| | 6 | 2 | 30 | 54 | 36 | 26 | 50 | 18 | 18 |
| 1 | 3 | 2 | 30 | 55 | 0 | 25 | 44 | 17 | 33 |
| 1 | 0 | 2 | 30 | 55 | 22 | 24 | 38 | 16 | 48 |
| 0 | 57 | | 29 | 55 | 26 | 23 | 32 | 16 | 3 |
| 0 | 54 | | 29 | 56 | 12 | 22 | 26 | 15 | 18 |
| 0 | 51 | | 29 | 56 | 36 | 21 | 20 | 14 | 33 |
| 0 | 48 | | 29 | 57 | 0 | 20 | 14 | 13 | 48 |
| | 45 | | 29 | 57 | 16 | 19 | 8 | 13 | 3 |
| | 42 | | 29 | 57 | 32 | 18 | 2 | 12 | 18 |
| | 39 | | 28 | 57 | 48 | 16 | 56 | 11 | 33 |
| | 36 | | 28 | 58 | 4 | 15 | 50 | 10 | 48 |
| | 33 | | 28 | 58 | 24 | 14 | 44 | 10 | 3 |
| | 31 | | 28 | 58 | 36 | 13 | 38 | 9 | 18 |
| | 28 | | 28 | 58 | 46 | 12 | 32 | 8 | 33 |
| | 25 | | 27 | 58 | 56 | 11 | 26 | 7 | 48 |
| | 22 | | 27 | 59 | 6 | 10 | 20 | 7 | 3 |
| | 19 | | 26 | | 16 | 9 | 14 | 6 | 18 |
| | 17 | | 26 | | 26 | 8 | 8 | 5 | 33 |
| | 15 | | 25 | 59 | 36 | 7 | 2 | 4 | 48 |
| | 12 | | 25 | 59 | 44 | 5 | 51 | 4 | 0 |
| | 10 | 2 | 24 | | 44 | 4 | 41 | 3 | 12 |
| 0 | 7 | 2 | 23 | | 46 | 3 | 30 | 2 | 24 |
| 0 | 5 | 2 | 22 | 59 | 52 | 2 | 20 | 1 | 36 |
| 0 | 2 | 2 | 21 | 59 | 56 | 1 | 10 | 0 | 48 |
| 0 | 0 | 2 | 20 | 60 | 0 | 0 | 0 | 0 | 0 |

## Veneris

| | Declinacio | | Reflexio | | M ad declinacionis | | M ad reflexionis | | Septentrionalis ascendens | |
|---|---|---|---|---|---|---|---|---|---|---|
| G | G | M | G | M | M | S | M | S | M | S |
| 271 | 0 | 2 | 1 | 55 | 59 | 56 | 1 | 4 | 0 | 11 |
| 272 | 0 | 3 | 1 | 54 | 59 | 52 | 2 | 8 | 0 | 22 |
| 273 | 0 | 4 | 1 | 53 | 59 | 48 | 3 | 12 | 0 | 33 |
| 274 | 0 | 5 | 1 | 52 | 59 | 44 | 4 | 16 | 0 | 44 |
| 275 | 0 | 7 | 1 | 51 | 59 | 40 | 5 | 20 | 0 | 54 |
| 276 | 0 | 8 | 1 | 50 | 59 | 36 | 6 | 24 | 1 | 4 |
| 277 | 0 | 9 | 1 | 49 | 59 | 26 | 7 | 24 | 1 | 14 |
| 278 | 0 | 11 | 1 | 48 | 59 | 16 | 8 | | 1 | 24 |
| 279 | 0 | 13 | 1 | 47 | 59 | 6 | 9 | | 1 | 34 |
| 280 | 0 | 14 | 1 | 45 | 58 | 56 | 10 | | 1 | 44 |
| 281 | 0 | 15 | 1 | 44 | 58 | 46 | 11 | | 1 | 54 |
| 282 | 0 | 16 | 1 | 43 | 58 | 36 | 12 | 24 | 2 | 4 |
| 283 | 0 | 18 | 1 | 41 | 58 | 20 | 13 | 24 | 2 | 14 |
| 284 | 0 | 19 | 1 | 40 | 58 | 4 | 14 | | 2 | 24 |
| 285 | 0 | 20 | 1 | 39 | 57 | 48 | 15 | | 2 | 34 |
| 286 | 0 | 21 | 1 | 38 | 57 | 32 | 16 | | 2 | 44 |
| 287 | 0 | 22 | 1 | 37 | 57 | 16 | 17 | | 2 | 54 |
| 288 | 0 | 23 | 1 | 35 | 57 | 0 | 18 | | 3 | 4 |
| 289 | 0 | 24 | 1 | 34 | 56 | 36 | 19 | | 3 | 14 |
| 290 | 0 | 25 | 1 | 33 | 56 | 12 | 20 | | 3 | 24 |
| 291 | 0 | 26 | 1 | 32 | 55 | 48 | 21 | | 3 | 34 |
| 292 | 0 | 27 | 1 | 31 | 55 | 24 | 22 | | 3 | 44 |
| 293 | 0 | 28 | 1 | 29 | 55 | 0 | 23 | 24 | 3 | 54 |
| 294 | 0 | 29 | 1 | 28 | 54 | 46 | 24 | 24 | 4 | 4 |
| 295 | 0 | 30 | 1 | 27 | 54 | 10 | 25 | 20 | 4 | 14 |
| 296 | 0 | 32 | 1 | 25 | 53 | 44 | 26 | 16 | 4 | 24 |
| 297 | 0 | 33 | 1 | 24 | 53 | 18 | 27 | 12 | 4 | 33 |
| 298 | 0 | 34 | 1 | 23 | 52 | 52 | 28 | 8 | 4 | 42 |
| 299 | 0 | 35 | 1 | 22 | 52 | 26 | 29 | 4 | 4 | 51 |
| 300 | 0 | 36 | 1 | 20 | 52 | 0 | 30 | 0 | 5 | 0 |
| 301 | 0 | 37 | 1 | 19 | 51 | 24 | 30 | 52 | 5 | 9 |
| 302 | 0 | 38 | 1 | 18 | 50 | 48 | 31 | 44 | 5 | 18 |
| 303 | 0 | 39 | 1 | 17 | 50 | 12 | 32 | 36 | 5 | 27 |
| 304 | 0 | 40 | 1 | 16 | 49 | 36 | 33 | 28 | 5 | 36 |
| 305 | 0 | 41 | 1 | 14 | 49 | 0 | 34 | 20 | 5 | 44 |
| 306 | 0 | 41 | 1 | 13 | 48 | 24 | 35 | 12 | 5 | 52 |
| 307 | 0 | 42 | 1 | 12 | 47 | 44 | 36 | 0 | 6 | 0 |
| 308 | 0 | 43 | 1 | 11 | 47 | 4 | [illegible] | 48 | 6 | 8 |
| 309 | 0 | 44 | 1 | 9 | 46 | 24 | [illegible] | 36 | 6 | 16 |
| 310 | 0 | 45 | 1 | 8 | 45 | 44 | 38 | 24 | 6 | 24 |
| 311 | 0 | 46 | 1 | 6 | 45 | 4 | 39 | 12 | 6 | 32 |
| 312 | 0 | 46 | 1 | 5 | 44 | 24 | 40 | 0 | 6 | 40 |
| 313 | 0 | 47 | 1 | 4 | 43 | 40 | 40 | 44 | 6 | 48 |
| 314 | 0 | 48 | 1 | 3 | 42 | 46 | 41 | 26 | 6 | 55 |
| 315 | 0 | 49 | 1 | 1 | 42 | 12 | 42 | 12 | 7 | 3 |

## Mercurii

| Declinacio | | Reflexio | | M ad declinacionem | | M ad reflexionem | | Meridionalis descendens | |
|---|---|---|---|---|---|---|---|---|---|
| G | M | G | M | M | S | M | S | M | S |
| 0 | 3 | 2 | 19 | 59 | 56 | 0 | 58 | 0 | 48 |
| 0 | 6 | 2 | 18 | 59 | 52 | 1 | 56 | 1 | 36 |
| 0 | 9 | 2 | 17 | 59 | 48 | 2 | 54 | 2 | 24 |
| 0 | 12 | 2 | 16 | 59 | 44 | 3 | 52 | 3 | 12 |
| 0 | 14 | 2 | 15 | 59 | 40 | 4 | 50 | 4 | 0 |
| 0 | 16 | 2 | 14 | 59 | 36 | 5 | 46 | 4 | 48 |
| 0 | 17 | 2 | 13 | 59 | 36 | 6 | 40 | 5 | 33 |
| 0 | 19 | 2 | 12 | 59 | 16 | 7 | 36 | 6 | 18 |
| 0 | 20 | 2 | 11 | 59 | 6 | 8 | 28 | 7 | 3 |
| 0 | 22 | 2 | 9 | 58 | 56 | 9 | 12 | 7 | 48 |
| 0 | 24 | 2 | 8 | 58 | 46 | 10 | 16 | 8 | 33 |
| 0 | 26 | 2 | 7 | 58 | 36 | 11 | 10 | 9 | 18 |
| 0 | 28 | 2 | 6 | 58 | 20 | 12 | 4 | 10 | 3 |
| 0 | 30 | 2 | 5 | 58 | 4 | 12 | 58 | 10 | 48 |
| 0 | 32 | 2 | 4 | 57 | 48 | 13 | 52 | 11 | 33 |
| 0 | 34 | 2 | 3 | 57 | 32 | 14 | 46 | 12 | 18 |
| 0 | 36 | 2 | 1 | 57 | 11 | 15 | 40 | 13 | 3 |
| 0 | 38 | 2 | 0 | 57 | 0 | 16 | 34 | 13 | 48 |
| 0 | 40 | 1 | 58 | 56 | 32 | 17 | 28 | 14 | 33 |
| 0 | 42 | 1 | 57 | 56 | 12 | 18 | 22 | 15 | 18 |
| 0 | 44 | 1 | 56 | 55 | 48 | 19 | 16 | 16 | 3 |
| 0 | 46 | 1 | 54 | 55 | 24 | 20 | 10 | 16 | 48 |
| 0 | 48 | 1 | 53 | 55 | 0 | 21 | 4 | 17 | 33 |
| 0 | 49 | 1 | 52 | 54 | 36 | 21 | 58 | 18 | 18 |
| 0 | 51 | 1 | 50 | 54 | 10 | 22 | 52 | 19 | 0 |
| 0 | 53 | 1 | 49 | 53 | 44 | 23 | 38 | 19 | 42 |
| 0 | [illegible] | 1 | 48 | 53 | 18 | 24 | 28 | 20 | 24 |
| 0 | 56 | 1 | 47 | 52 | 52 | 25 | 18 | 21 | 6 |
| 0 | [illegible] | 1 | 45 | 52 | 26 | 26 | 8 | 21 | 28 |
| 0 | 59 | 1 | 44 | 52 | 0 | 27 | 0 | 22 | 30 |
| 1 | 0 | 1 | 43 | 51 | 24 | 27 | 36 | 23 | 9 |
| 1 | 2 | 1 | 41 | 50 | 48 | 28 | 33 | 23 | 48 |
| 1 | 3 | 1 | 39 | 50 | 12 | 29 | 20 | 24 | 27 |
| 1 | 4 | 1 | 38 | 49 | 36 | 30 | 7 | 25 | 6 |
| 1 | 7 | 1 | 36 | 49 | 0 | 30 | 54 | 25 | 45 |
| 1 | 8 | 1 | 35 | 48 | 24 | 31 | 41 | 26 | 24 |
| 1 | 10 | 1 | 33 | 47 | 44 | 32 | 24 | 27 | 0 |
| 1 | 11 | 1 | 32 | 47 | 4 | 33 | 7 | 27 | 36 |
| 1 | 12 | 1 | 30 | 46 | 24 | 33 | 40 | 28 | 12 |
| 1 | 13 | 1 | 29 | 45 | 44 | 34 | 33 | 28 | 48 |
| 1 | 14 | 1 | 27 | 45 | 4 | 35 | 16 | 29 | 24 |
| 1 | 15 | 1 | 26 | 44 | 24 | 36 | 0 | 30 | 0 |
| 1 | 16 | 1 | 25 | 43 | 44 | 36 | 44 | 30 | 33 |
| 1 | 17 | 1 | 23 | 43 | 46 | 37 | 20 | 31 | 6 |
| 1 | 19 | 1 | 22 | 42 | 12 | 37 | 49 | 31 | 39 |

## Veneris

| | Declinatio | | Reflexio | | M ad declinationem | | M ad reflexionem | | Atremi Ascendens | |
|---|---|---|---|---|---|---|---|---|---|---|
| G | G | M | G | M | M | 2 | M | 2 | M | 2 |
| 316 | 0 | 50 | 1 | 0 | 41 | 28 | 42 | 56 | 7 | 10 |
| 317 | 0 | 51 | 0 | 58 | 40 | 44 | 43 | 40 | 7 | 17 |
| 318 | 0 | 51 | 0 | 57 | 40 | 0 | 44 | 24 | 7 | 24 |
| 319 | 0 | 52 | 0 | 56 | 39 | 11 | 45 | 0 | 7 | 31 |
| 320 | 0 | 52 | 0 | 55 | 38 | 24 | 45 | 40 | 7 | 38 |
| 321 | | 53 | | 53 | 37 | 36 | 46 | 24 | 7 | 45 |
| 322 | | 54 | | 52 | 36 | 48 | 47 | 4 | 7 | 52 |
| 323 | | 54 | | 51 | 36 | 0 | 47 | 44 | 7 | 58 |
| 324 | | 55 | 0 | 49 | 35 | 12 | 48 | 24 | 8 | 4 |
| 325 | | 56 | 0 | 48 | 34 | 20 | 49 | 0 | 8 | 10 |
| 326 | | 56 | 0 | 47 | 33 | 28 | 49 | 36 | 8 | 16 |
| 327 | 0 | 56 | 0 | 45 | 32 | 36 | 50 | 12 | 8 | 22 |
| 328 | 0 | 57 | 0 | 44 | 31 | 44 | 50 | 48 | 8 | 28 |
| 329 | 0 | 57 | 0 | 42 | 30 | 52 | 51 | 24 | 8 | 34 |
| 330 | | 57 | | 41 | 30 | 0 | 52 | 0 | 8 | 40 |
| 331 | | 58 | | 40 | 29 | 4 | 52 | 26 | 8 | 45 |
| 332 | | 58 | | 39 | 28 | 8 | 52 | 52 | 8 | 49 |
| 333 | | 58 | | 37 | 27 | 12 | 53 | 18 | 8 | 53 |
| 334 | | 59 | | 36 | 26 | 16 | 53 | 44 | 8 | 59 |
| 335 | 0 | 59 | | 34 | 25 | 20 | 54 | 10 | 9 | 2 |
| 336 | 0 | 59 | | 33 | 24 | 24 | 54 | 36 | 9 | 6 |
| 337 | 0 | 59 | | 31 | 23 | 34 | 55 | 0 | 9 | 10 |
| 338 | 1 | 0 | 0 | 29 | 22 | 34 | 55 | 24 | 9 | 14 |
| 339 | 1 | 0 | 0 | 28 | 21 | | 55 | 48 | 9 | 18 |
| 340 | 1 | 0 | 0 | 27 | 20 | | 56 | 12 | 9 | 22 |
| 341 | 1 | 0 | 0 | 25 | 19 | | 56 | 36 | 9 | 26 |
| 342 | 1 | 0 | 0 | 24 | 18 | 24 | 57 | 0 | 9 | 30 |
| 343 | 1 | 0 | 0 | 22 | 17 | 24 | 57 | 16 | 9 | 33 |
| 344 | 1 | 0 | | 21 | 16 | 24 | 57 | 32 | 9 | 36 |
| 345 | 1 | 1 | | 20 | 15 | | 57 | 48 | 9 | 39 |
| 346 | | 1 | | 18 | 14 | | 58 | 4 | 9 | 42 |
| 347 | | 1 | | 17 | 13 | | 58 | 20 | 9 | 44 |
| 348 | | 1 | | 16 | 12 | | 58 | 36 | 9 | 46 |
| 349 | 1 | 1 | 0 | 15 | 11 | | 58 | 46 | 9 | 47 |
| 350 | 1 | 1 | 0 | 14 | 10 | | 58 | 56 | 9 | 49 |
| 351 | 1 | 2 | 0 | 12 | 9 | | 59 | 6 | 9 | 51 |
| 352 | 1 | 2 | 0 | 11 | 8 | 24 | 59 | 16 | 9 | 52 |
| 353 | | 2 | | 9 | 7 | 24 | 59 | 26 | 9 | 54 |
| 354 | | 2 | | 8 | 6 | 24 | 59 | 36 | 9 | 56 |
| 355 | | 2 | | 6 | 5 | 20 | 59 | 40 | 9 | 56 |
| 356 | 1 | 2 | | 5 | 4 | 16 | 59 | 44 | 9 | 57 |
| 357 | 1 | 3 | 0 | 3 | 3 | 12 | 59 | 48 | 9 | 58 |
| 358 | 0 | 3 | 0 | 2 | 2 | 8 | 59 | 52 | 9 | 59 |
| 359 | 1 | 3 | 0 | 1 | 1 | 4 | 59 | 56 | 9 | 59 |
| 360 | 1 | 3 | 0 | 0 | 0 | 0 | 60 | 10 | 10 | 0 |

## Mercurii

| Declinatio | | Reflexio | | M. ad declinationem | | M ad reflexionem | | Meri diot descendens | |
|---|---|---|---|---|---|---|---|---|---|
| G | M | G | M | M | 2 | M | 2 | M | 2 |
| 1 | 20 | 1 | 20 | 41 | 28 | 38 | 39 | 32 | 12 |
| 1 | 22 | 1 | 19 | 40 | 44 | 39 | 18 | 32 | 45 |
| 1 | 23 | 1 | 17 | 40 | 0 | 39 | 48 | 33 | 18 |
| 1 | 25 | 1 | 15 | 39 | 12 | 40 | 34 | 33 | 48 |
| 1 | 26 | 1 | 13 | 38 | 24 | 41 | 10 | 34 | 18 |
| 1 | 27 | 1 | 11 | 37 | 36 | 41 | 46 | 34 | 48 |
| 1 | 28 | 1 | 9 | 36 | 48 | 42 | 22 | 35 | 18 |
| 1 | 29 | 1 | 7 | 36 | 0 | 42 | 48 | 35 | 48 |
| 1 | 30 | 1 | 6 | 35 | 12 | 43 | 34 | 36 | 18 |
| 1 | 31 | 1 | 4 | 34 | 20 | 44 | 7 | 36 | 45 |
| 1 | 32 | 1 | 2 | 33 | 28 | 44 | 39 | 37 | 12 |
| 1 | 33 | 1 | 0 | 32 | 36 | 45 | 12 | 37 | 39 |
| 1 | 34 | 0 | 59 | 31 | 44 | 45 | 44 | 38 | 6 |
| 1 | 35 | 0 | 57 | 30 | 52 | 46 | 16 | 38 | 33 |
| 1 | 36 | 0 | 55 | 30 | 0 | 46 | 48 | 39 | 0 |
| 1 | 37 | 0 | 53 | 29 | 4 | 47 | 12 | 39 | 20 |
| 1 | 38 | 0 | 52 | 28 | 8 | 47 | 35 | 39 | 39 |
| 1 | 39 | 0 | 49 | 27 | 12 | 47 | 59 | 39 | 59 |
| 1 | 39 | 0 | 48 | 26 | 20 | 48 | 22 | 40 | 18 |
| 1 | 40 | 0 | 46 | 25 | 16 | 48 | 45 | 40 | 38 |
| 1 | 40 | 0 | 44 | 24 | 20 | 49 | 8 | 40 | 57 |
| 1 | 41 | 0 | 42 | 23 | 24 | 49 | 30 | 41 | 14 |
| 1 | 41 | 0 | 40 | 22 | 24 | 49 | 52 | 41 | 33 |
| 1 | 42 | 0 | 38 | 21 | 24 | 50 | 14 | 41 | 51 |
| 1 | 42 | | 36 | 20 | | 50 | 36 | 42 | 9 |
| 1 | 43 | | 35 | 19 | | 50 | 57 | 42 | 27 |
| 1 | 43 | | 33 | 18 | | 51 | 18 | 42 | 44 |
| 1 | 43 | | 31 | 17 | | 51 | 32 | 42 | 57 |
| 1 | 43 | 0 | 29 | 16 | | 51 | 56 | 43 | 9 |
| 1 | 44 | 0 | 27 | 15 | | 52 | 0 | 43 | 21 |
| 1 | 44 | 0 | 25 | 14 | | 52 | 14 | 43 | 33 |
| 1 | 44 | 0 | 23 | 13 | | 52 | 29 | 43 | 45 |
| 1 | 44 | 0 | 22 | 12 | | 52 | 44 | 43 | 57 |
| 1 | 44 | | 20 | 11 | | 52 | 53 | 44 | 9 |
| 1 | 44 | | 18 | 10 | | 53 | 2 | 44 | 11 |
| 1 | 45 | | 16 | 9 | | 53 | 11 | 44 | 20 |
| 1 | 45 | | 14 | 8 | | 53 | 20 | 44 | 27 |
| 1 | 45 | | 13 | 7 | 24 | 53 | 29 | 44 | 35 |
| 1 | 45 | | 11 | 6 | 24 | 53 | 38 | 44 | 42 |
| 1 | 45 | | 9 | 5 | 20 | 53 | 41 | 44 | 45 |
| 1 | 45 | | 7 | 4 | 16 | 53 | 45 | 44 | 48 |
| 1 | 45 | 0 | 5 | 3 | 12 | 53 | 49 | 44 | 51 |
| 1 | 46 | 0 | 3 | 2 | 8 | 53 | 53 | 44 | 54 |
| 1 | 46 | 0 | 1 | 1 | 4 | 53 | 56 | 44 | 57 |
| 1 | 46 | 0 | 0 | 0 | 0 | 54 | 0 | 44 | 0 |

# Tabula longitudinum et latitudinum regionum

| | Longitudo G | M | Latitudo G | M | | Longitudo G | M | Latitudo G | M | | Longitudo G | M | Latitudo G | M | | Longitudo G | M | Latitudo G | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tangea | 6 | 30 | 35 | 15 | Lisbona m | 11 | | 49 | | Amedia Assiria | 32 | 0 | 13 | | Vedem | 61 | | 29 | |
| Cepta | 8 | 0 | 35 | 30 | Ilta | 10 | | 31 | | Lyps | 33 | 40 | 41 | | Emed | 62 | | 37 | |
| Corduba | 9 | 27 | 37 | 30 | Mantua | 13 | 36 | 36 | | Augusta vindelicorum | 33 | 40 | 46 | | Kamach | 63 | | 2 | |
| Longitudo toleti | 28 | 30 | 22 | 0 | Expa Augusti | 13 | 40 | 41 | | Verona | 33 | 20 | 44 | | Kabrich | 64 | | 16 | |
| Gades herculis francie | 23 | 20 | 24 | 40 | Tanap | 14 | 30 | 10 | 0 | Venecie | 33 | 30 | 45 | | Almedia | 64 | 20 | 25 | |
| Insula Tile | 10 | 40 | 37 | 15 | Granata | 14 | 30 | 30 | 45 | Patavium | 33 | 20 | 45 | | Gaida | 66 | 30 | 30 | |
| Cartago | 27 | 10 | 37 | 0 | Aloz | 16 | | 43 | 45 | Ferraria | 33 | 30 | 44 | | Mecha | 67 | | 21 | |
| Armenia | 77 | 0 | 41 | 0 | Insula | 17 | | 45 | | Bononia | 33 | 20 | 44 | 30 | Mebara | 68 | | 10 | |
| Mericha | [illegible] | 20 | 31 | 0 | Dyomins | 17 | | 43 | | Pise | 33 | 30 | 43 | 30 | Alinsa | 69 | 30 | 35 | 40 |
| Messia egipti | [illegible] | 0 | 30 | 0 | Cabaria | 18 | | 35 | | Florencia | 33 | 40 | 43 | 10 | Valdach | 70 | | 32 | |
| Domus babilonie | 78 | 0 | 35 | 0 | Kotinga | 19 | 35 | 40 | | Villach | 33 | 35 | 46 | | Azim | 72 | 30 | 0 | |
| Paradisus | 18 | 0 | 0 | 9 | Colosa | 19 | 35 | 43 | | Madeburg | 33 | 40 | 51 | | Azab | 73 | | 36 | |
| Ierusalem | 56 | 30 | 31 | 40 | Armenia | 20 | 20 | 20 | | Eitzburg | 33 | 20 | 48 | | Aluapa | 74 | | 36 | |
| Damascus | 60 | 0 | 33 | 0 | Girona | 21 | 20 | 49 | | Sena | 32 | 20 | 43 | 30 | Por | 75 | | 31 | |
| Anthiochia | 67 | 20 | 35 | 30 | Perusium | 21 | 0 | 42 | | Perusium | 32 | 20 | 43 | | Zemech | 76 | | 12 | |
| Constantinopolis | 46 | 20 | 45 | 20 | Insegem | 21 | | 21 | | Vienna panonie | 32 | 4 | 48 | | Armenia | 77 | | 41 | |
| Roma | 36 | 54 | 41 | 20 | Civitas regis magni | 22 | 0 | 20 | | Augusburgum | 32 | 20 | 42 | | Babilon | 78 | | 35 | |
| Florentia | 33 | 54 | 43 | 30 | Lugdunum | 22 | 20 | 45 | | Lubeca | 32 | 20 | 56 | | Pebil | 79 | | 32 | |
| Parisius | 23 | 11 | 48 | 10 | Avinio | 22 | 20 | 44 | | Roma | 34 | 20 | 42 | | Assar | 81 | | 25 | |
| Toletum | 11 | 0 | 39 | 54 | Viena pro Romane | 22 | 20 | 44 | | Avion | 36 | 0 | 44 | 30 | Traben | 82 | | 21 | |
| Cremona | [illegible] | 30 | 45 | 0 | Massilia | 23 | 20 | 43 | 40 | Praga | 36 | 20 | 50 | | Civitas Seeh | 83 | | 31 | |
| Argentina | 30 | 27 | 47 | 40 | Parisius | 22 | 20 | 48 | | Sicilia m | 37 | 40 | 37 | | Marorh | 84 | | 38 | |
| Colonia | 27 | 30 | 49 | 55 | Gandavum | 24 | 20 | 42 | | Panormum | 37 | 30 | 38 | 16 | Alre | 86 | | 26 | |
| Buda | 32 | 48 | 47 | 46 | Mulhusia | 24 | 20 | 41 | | Neapolis | 37 | 0 | 40 | 20 | Wamda | 87 | | 40 | |
| Augusta | 28 | 32 | 40 | 9 | Marsbona | 24 | 0 | 43 | | Sirena | 37 | 10 | 63 | | Gagar | 91 | | 40 | |
| Herbipolis | 28 | 32 | 51 | 16 | Sibilia | 24 | 35 | 37 | 30 | Falesini | 38 | 20 | 41 | | Fergana | 92 | | 43 | |
| Magdeburch | 28 | 39 | 52 | 32 | Mons pessulanus | 26 | 0 | 43 | | Regina | 38 | 20 | 45 | | Balach | 94 | | 37 | |
| Brunsweyk | 26 | 25 | 51 | 16 | Colonia agrippina | 26 | 40 | 51 | | Brundusium | 40 | 30 | 41 | | Chebim | 100 | | 28 | |
| Erfordia | 27 | 0 | 51 | 10 | Aggrippina | 26 | 35 | 40 | | Malta | 40 | 20 | 41 | 20 | Chapsi | 107 | | 2 | |
| Praga | 29 | 30 | 50 | 30 | Traiectum | 27 | 20 | 43 | | Neleyn | 41 | 0 | 39 | | Alonde gim | 110 | | 30 | |
| Cracovia | 32 | 36 | 49 | 40 | Constantia | 27 | 40 | 46 | | Tarentum | 41 | 0 | 40 | | Bemb | 114 | | 18 | |
| Vienna | 45 | 30 | 47 | 26 | Assfetina | 27 | 20 | 47 | | Buda | 42 | 20 | 41 | | Magre | 121 | | 16 | |
| Inna maior | 35 | 30 | 47 | 46 | Cartago | 27 | 0 | 32 | | Civitas magna | 43 | 0 | 68 | | Gerde | 124 | | 12 | |
| Brundusium | 27 | 0 | 43 | 15 | Helbonia | 28 | 0 | 49 | | Ostrana | 44 | 0 | 50 | | Helmon in | 127 | | 6 | |
| Sicilia | 42 | 30 | 43 | 0 | Hallis | 28 | 20 | 49 | | Cracovia | 44 | 20 | 50 | | Marsula | 129 | | 8 | |
| Vinencia | 32 | 42 | 42 | 0 | Edinia | 28 | 0 | 35 | | Cassovia | 44 | 20 | 49 | | Albertum | 130 | | 30 | |
| Placentia | 31 | 20 | 44 | 5 | Herbipol | 29 | 20 | 40 | | Dantiscum | 44 | 20 | 56 | | Civitas regis Alim | 140 | | 18 | |
| Bononia | 32 | 35 | 44 | 33 | Pisaurum | 29 | 0 | 45 | 14 | Ancira | 45 | 0 | 42 | | Herefordia | 21 | 40 | 49 | 30 |
| Padua | 31 | 41 | 44 | 30 | Senna | 29 | | 43 | 30 | Barta | 46 | 3 | 31 | | Roma | 36 | 20 | 42 | 0 |
| Pisa | 33 | 0 | 45 | 0 | Tunix | 29 | | 38 | | Anbuzi | 48 | | 20 | | Toletum | 11 | 0 | [illegible] | |
| Avinona | 27 | 20 | 45 | 20 | Nurnberga | 30 | 20 | 43 | | Alkasarina | 49 | | 45 | | | | | | |
| Venetie | 33 | 0 | 45 | 10 | Inrenberga | 30 | 20 | 49 | | Constantinopolis bizancii | 50 | | 45 | | | | | | |
| Ferraria | 32 | 0 | 45 | 0 | Ulma | 30 | 20 | 47 | | Alexandria | 51 | 20 | 31 | | | | | | |
| Egestinsium | 33 | 30 | 45 | 45 | Moravia | 30 | 14 | 47 | 30 | Medina | 52 | | 36 | | | | | | |
| Tolosa | 33 | 27 | 49 | 45 | Mediolanum | 30 | 20 | 44 | 40 | Heraclia | 53 | 54 | 46 | 34 | | | | | |
| Francia | 19 | 0 | 0 | 0 | Taurinum | 30 | 40 | 43 | | Damaraca | 54 | | 31 | | | | | | |
| Capha | 63 | 0 | 48 | 0 | Esfordia | 31 | 20 | 41 | | Ingerene egipti | 54 | | 29 | 20 | | | | | |
| Septentrionale m | 0 | | | 0 | Wyrdstadium | 31 | 20 | 49 | | Jerlm | 56 | | 32 | | | | | | |
| Marina | 3 | | | 11 | Ratisbona | 31 | 40 | 49 | | Calidunia | 58 | 30 | 30 | | | | | | |
| Compostella | 4 | | 45 | | Cremona | 31 | | 45 | | Anezo | 59 | | 43 | | | | | | |
| Ulixbona | 4 | | 41 | | Gadima | 31 | | 38 | | Damascum | 60 | | 33 | | | | | | |

Concordat latitudo

hec etiam [?] alia observare ponitur longitudo et latitudo regionum et civitatum

Et respectu graduum longitudinis hic computatur ab occidente

Latitudines civitatum regni ungarie atque aliarum [illegible]

| | G | M |
|---|---|---|
| Pozonium | 48 | 15 |
| Tyrnaw Celie | 48 | 8 |
| Zagrabien | 45 | 40 |
| Vienen | 48 | 20 |
| Bernen | 49 | 22 |
| Wyskow | 49 | 30 |
| Cromerig | 49 | 52 |
| Olomucgen | 49 | 47 |
| Prodstat | 49 | 21 |
| Strigonium | 47 | 45. |
| Budensis | 47 | 46 |
| Varadinum | 46 | 40 |
| Alba regia | 47 | 27 |
| Colosvar | 47 | 0 |
| Vesprima | 47 | 15 |
| Casthomar | 48 | 28 |
| Lengerova | 47 | 42 |
| Gradek | 49 | 0 |
| Okana | 49 | 32 |
| Roma | 42 | |
| Wratislavia | 51 | |
| Alexandria | 30 | 58. |
| Nurenbergen | | |

| | longitudo | latitudo G |
|---|---|---|
| Colonia | 10 | 51. |
| Cracovia | 43 | 51 |
| Coloma | 29 | 52 |
| Cdamo | 24 | 56 |
| Calisia | 42 34. | 52 40 |

ab Insulis fortunatis
usque [illegible]
[illegible] de [illegible]
[illegible] 30 et [illegible]
[illegible] a toleto

[illegible] latitudo [illegible]
tabularum toletanarum 39.
gradus et 49 minutorum longi-
tudo [illegible] ab oriente 95 gradibus

Norembergae longitudo 30
gradus [illegible]
[illegible] adde 16 minuta
[illegible] pro
[illegible] 16 minuta

| | 0 Sinus | Cor. vm 10 sec. | 1 Sinus | Cor. vm 10 sec. | 2 Sinus | Cor. vm 10 sec. | 3 Sinus | Cor. vm 10 sec. | 4 Sinus | Cor. vm 10 sec. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1745 | 291 | 106460 | 291 | 211141 | 291 | 315759 | 290 | 420281 | 290 | 1 |
| 2 | 3401 | 291 | 8205 | 291 | 2885 | 291 | 7502 | 290 | 2022 | 290 | 2 |
| 3 | 5236 | | 9950 | | 4630 | | 9244 | | 3763 | | 3 |
| 4 | 6982 | | 111695 | | 6374 | | 320987 | | 5504 | | 4 |
| 5 | 8727 | | 3440 | | 8118 | | 2730 | | 7245 | | 5 |
| 6 | 10472 | | 5184 | | 9862 | | 4473 | | 8986 | | 6 |
| 7 | 12210 | | 6930 | | 221606 | | 6216 | | 430727 | | 7 |
| 8 | 3963 | | 8675 | | 3351 | | 7958 | | 432467 | | 8 |
| 9 | 5709 | | 120420 | | 5095 | | 9701 | | 4208 | | 9 |
| 10 | 7454 | | 2165 | | 6839 | | 331444 | | 5949 | | 10 |
| 11 | 19199 | | 3910 | | 8583 | | 3187 | | 7690 | | 11 |
| 12 | 20944 | | 5655 | | 230327 | | 4929 | | 9430 | | 12 |
| 13 | 22690 | | 7400 | | 2071 | | 6672 | | 441171 | | 13 |
| 14 | 4435 | | 9146 | | 3815 | | 8414 | | 2911 | | 14 |
| 15 | 6180 | | 130890 | | 5559 | | 340157 | | 4652 | | 15 |
| 16 | 7925 | | 2635 | | 7303 | | 1899 | | 6392 | | 16 |
| 17 | 9671 | | 4380 | | 9047 | | 3642 | | 8133 | | 17 |
| 18 | 31416 | | 6124 | | 240791 | | 5384 | | 9873 | | 18 |
| 19 | 33162 | | 7869 | | 242535 | | 7127 | | 451614 | | 19 |
| 20 | 34907 | | 139614 | | 4279 | | 8869 | | 3354 | | 20 |
| 21 | 6652 | | 141359 | | 6023 | | 350611 | | 5094 | | 21 |
| 22 | 8397 | | 3104 | | 7767 | | 2354 | | 6834 | | 22 |
| 23 | 40143 | | 4848 | | 9510 | | 4096 | | 8575 | | 23 |
| 24 | 1888 | | 6593 | | 251254 | | 5838 | | 460315 | | 24 |
| 25 | 3633 | | 8338 | | 2998 | | 7580 | | 2055 | | 25 |
| 26 | 5378 | | 150083 | | 4742 | | 9322 | | 3795 | | 26 |
| 27 | 7123 | | 1828 | | 6485 | | 361064 | | 5535 | | 27 |
| 28 | 8869 | | 3572 | | 8229 | | 2807 | | 7275 | | 28 |
| 29 | 50614 | | 5317 | | 9972 | | 4549 | | 9015 | | 29 |
| 30 | 2359 | | 7062 | | 261716 | | 6291 | | 470755 | | 30 |
| 31 | 4104 | | 8807 | | 3460 | | 8033 | | 2495 | | 31 |
| 32 | 5850 | | 160551 | | 5203 | | 9775 | | 4235 | | 32 |
| 33 | 7595 | | 2296 | | 6947 | | 371517 | | 5974 | | 33 |
| 34 | 59341 | | 4040 | | 8690 | | 3259 | | 7714 | | 34 |
| 35 | 61086 | | 5784 | | 270434 | | 5001 | | 9454 | | 35 |
| 36 | 62831 | | 7530 | | 2178 | | 6743 | | 481194 | | 36 |
| 37 | 4576 | | 9274 | | 3921 | | 8484 | | 2933 | | 37 |
| 38 | 6322 | | 171019 | | 5664 | | 380226 | | 4673 | | 38 |
| 39 | 8067 | | 2763 | | 7408 | | 1968 | | 6412 | | 39 |
| 40 | 9812 | | 4508 | | 9152 | | 3710 | | 8152 | | 40 |
| 41 | 71557 | | 6253 | | 280895 | | 5452 | | 9891 | | 41 |
| 42 | 3302 | | 7997 | | 2639 | | 7194 | | 491631 | | 42 |
| 43 | 5048 | | 9742 | | 4382 | | 8935 | | 3370 | | 43 |
| 44 | 6793 | | 181486 | | 6126 | | 390699 | | 5110 | | 44 |
| 45 | 78538 | | 183231 | | 287869 | | 392419 | | 6849 | | 45 |
| 46 | 80283 | | 4975 | | 9612 | | 394161 | | 8588 | | 46 |
| 47 | 2028 | | 6720 | | 291355 | | 5902 | | 500327 | | 47 |
| 48 | 3774 | | 8464 | | 3099 | | 7644 | | 2067 | | 48 |
| 49 | 5519 | | 190209 | | 4842 | | 9385 | | 3806 | | 49 |
| 50 | 7264 | | 1953 | | 6585 | | 401127 | | 5545 | | 50 |
| 51 | 9009 | | 3697 | | 8328 | | 2868 | | 7284 | | 51 |
| 52 | 90754 | | 5442 | | 300071 | | 4610 | | 9023 | | 52 |
| 53 | 2500 | | 7186 | | 1815 | | 6351 | | 510762 | | 53 |
| 54 | 4245 | | 8931 | | 3558 | | 8093 | | 2501 | | 54 |
| 55 | 5990 | | 200675 | | 5301 | | 9834 | | 4240 | | 55 |
| 56 | 7735 | | 2419 | | 7044 | | 411575 | | 5979 | | 56 |
| 57 | 9480 | | 4164 | | 8787 | | 3316 | | 7718 | | 57 |
| 58 | 101225 | | 5908 | | 310530 | | 5058 | | 9456 | | 58 |
| 59 | 102979 | 291 | 7653 | 291 | 312273 | 291 | 6799 | 290 | 521194 | 290 | 59 |
| 60 | 104714 | 291 | 209397 | 291 | 314016 | 290 | 418540 | 290 | 522934 | 290 | 60 |

| | 5 | | 6 | | 7 | | 8 | | 9 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sinus | | Sinus | | Sinus | | Sinus | | Sinus | | |
| 1 | 524673 | 290 | 628907 | 289 | 732947 | 289 | 836768 | 288 | 940331 | 287 | 1 |
| 2 | 6411 | | 630642 | | 4679 | | 8496 | | 2054 | | 2 |
| 3 | 8140 | | 2378 | | 6412 | | 840224 | | 3778 | | 3 |
| 4 | 9888 | | 4113 | | 8144 | | 1953 | | 5501 | | 4 |
| 5 | 531627 | | 5849 | | 9876 | | 3681 | | 7225 | | 5 |
| 6 | 3364 | | 7584 | | 741608 | | 5409 | | 8948 | | 6 |
| 7 | 5104 | | 9320 | | 3340 | | 7137 | | 950671 | | 7 |
| 8 | 6842 | | 641055 | | 5071 | | 8865 | | 2395 | | 8 |
| 9 | 8581 | | 2791 | | 6803 | | 850592 | | 4118 | | 9 |
| 10 | 540319 | | 4526 | | 8534 | | 2320 | | 5841 | | 10 |
| 11 | 2057 | | 6261 | | 750264 | | 4047 | | 7564 | | 11 |
| 12 | 3795 | | 7996 | | 1998 | | 5774 | | 9287 | | 12 |
| 13 | 5534 | | 9731 | | 3730 | | 7502 | | 961009 | | 13 |
| 14 | 7272 | | 651466 | | 5461 | | 9230 | | 2732 | | 14 |
| 15 | 9010 | | 3201 | | 7193 | | 860957 | | 4455 | | 15 |
| 16 | 550748 | | 4936 | | 8924 | | 2684 | | 6177 | | 16 |
| 17 | 2486 | | 6671 | | 760655 | | 4411 | | 7900 | | 17 |
| 18 | 4224 | | 8405 | | 2387 | | 6139 | | 9622 | | 18 |
| 19 | 5962 | | 660140 | | 4118 | | 7866 | | 971345 | | 19 |
| 20 | 7700 | | 661875 | | 5849 | | 9593 | | 3067 | | 20 |
| 21 | 9438 | | 3609 | | 7580 | | 871320 | | 4789 | | 21 |
| 22 | 561175 | | 5344 | | 9311 | | 3047 | | 6511 | | 22 |
| 23 | 2913 | | 7078 | | 771042 | | 4773 | | 8233 | | 23 |
| 24 | 4650 | | 8813 | | 2773 | 289 | 6500 | | 9955 | | 24 |
| 25 | 6388 | | 670547 | | 4504 | 288 | 8[illegible]27 | | 981677 | | 25 |
| 26 | 8125 | | 2281 | | 6234 | | 9953 | | 3399 | | 26 |
| 27 | 9863 | | 4014 | | 7964 | | 881679 | | 5120 | | 27 |
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| | 10 Sinus | | 11 Sinus | | 12 Sinus | | 13 Sinus | | 14 Sinus | | |
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| 41 | 1922 | | 2491 | | 2536 | | 2025 | | 20209 | 28 | | 41 |
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| 39 | 5950 | | 3615 | | 2310605 | 269 | 6891 | 267 | 2444 | | 39 |
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| | 25 Sinus | | 26 Sinus | | 27 Sinus | | 28 Sinus | | 29 Sinus | | |
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| | 30 Sinus | | 31 Sinus | | 32 Sinus | | 33 Sinus | | 34 Sinus | | |
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| 25 | 7708 | | 7547 | | 6434 | | 4340 | | 3391242 | | 25 |
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| 34 | 3051243 | 251 | 3140941 | | 9684 | | 7441 | 242 | 4189 | | 34 |
| 35 | 2746 | 250 | 2428 | | 3231155 | | 8894 | | 5626 | 240 | 35 |
| 36 | 4248 | | 3914 | | 2625 | | 3320349 | | 7063 | 239 | 36 |
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| 38 | 7252 | | 6887 | | 5565 | | 3246 | | 9934 | | 38 |
| 39 | 8754 | | 8373 | | 7035 | | 4709 | | 3411371 | | 39 |
| 40 | 3060256 | | 9859 | | 8505 | | 6162 | | 2807 | | 40 |
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| 47 | 3070759 | | 3160251 | | 8782 | | 6323 | | 2847 | | 47 |
| 48 | 2258 | | 1734 | | 3250249 | | 7774 | | 4280 | | 48 |
| 49 | 3757 | | 3217 | | 1716 | 245 | 9224 | | 5713 | | 49 |
| 50 | 5256 | | 4700 | | 3183 | [illegible] | 3340674 | | 7146 | | 50 |
| 51 | 6754 | | 6183 | | 4649 | | 2124 | | 8578 | | 51 |
| 52 | 8252 | | 7665 | | 6114 | | 3573 | | 3430010 | | 52 |
| 53 | 9750 | | 9147 | | 7581 | | 5022 | | 1442 | | 53 |
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| 55 | 2746 | | 2111 | | 3260521 | | 7920 | 241 | 4304 | | 55 |
| 56 | 4243 | | 3592 | | 1977 | | 9368 | | 5736 | | 56 |
| 57 | 5740 | | 5073 | | 3442 | | 3350815 | | 7167 | | 57 |
| 58 | 7237 | | 6554 | | 4906 | | 2264 | | 8598 | | 58 |
| 59 | 8733 | 250 | 8035 | 247 | 6370 | 244 | 3711 | 241 | 3440028 | 239 | 59 |
| 60 | 3090229 | 250 | 3179515 | 247 | 3267834 | 244 | 3355148 | 241 | 3441448 | 239 | 60 |

| | 35 Sinus | | 36 Sinus | | 37 Sinus | | 38 Sinus | | 39 Sinus | |
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| 1 | 3442887 | 23 8 | 3528124 | 23 5 | 3612283 | 23 2 | 3695344 | 22 9 | 3777278 | 22 6 |
| 2 | 4316 | 23 8 | 9535 | 23 5 | 3676 | 23 2 | 6719 | 22 9 | 8634 | 22 6 |
| 3 | 5745 | | 3530946 | | 5069 | | 8094 | | 9990 | |
| 4 | 7174 | | 2357 | | 6462 | | 9468 | | 3781345 | |
| 5 | 8603 | | 3768 | | 7855 | | 3700842 | | 2700 | |
| 6 | 3450031 | | 5178 | | 9247 | | 2214 | | 4054 | |
| 7 | 1459 | | 6588 | | 3620639 | | 3588 | | 5408 | |
| 8 | 2887 | | 7998 | | 2031 | | 4961 | | 6762 | |
| 9 | 4314 | | 9408 | | 3422 | | 6334 | | 8116 | |
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| 11 | 7167 | | 2225 | | 6204 | | 9079 | | 3790823 | 22 6 |
| 12 | 8593 | | 3635 | | 7594 | | 3710451 | | 2176 | 22 5 |
| 13 | 3460019 | | 5043 | | 8984 | | 1822 | | 3528 | |
| 14 | 1445 | | 6451 | | 3630374 | | 3193 | 22 9 | 4880 | |
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| 17 | 5721 | 23 8 | 3550673 | | 4542 | 23 2 | 7304 | | 8934 | |
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| 21 | 3471418 | | 6299 | | 3640094 | | 2782 | | 4336 | |
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| 23 | 4264 | | 9109 | | 2868 | | 5518 | | 7034 | |
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| 26 | 8532 | | 3323 | | 7028 | | 9621 | | 3811080 | |
| 27 | 9954 | | 4727 | | 8414 | | 3730988 | | 2428 | |
| 28 | 3481376 | | 6131 | | 3649799 | | 2354 | | 3775 | |
| 29 | 2797 | | 7534 | | 3651184 | | 3722 | | 5122 | 22 5 |
| 30 | 4218 | | 8938 | | 2569 | | 5088 | | 6469 | 22 4 |
| 31 | 5638 | | 3570341 | | 3953 | | 6454 | | 7815 | |
| 32 | 7058 | | 1744 | | 5337 | | 7819 | | 9161 | |
| 33 | 8478 | | 3147 | | 6721 | | 9184 | | 3820507 | |
| 34 | 9898 | | 4547 | | 8104 | | 3740549 | 22 8 | 1853 | |
| 35 | 3491318 | | 5949 | | 9489 | | 1914 | 22 7 | 3198 | |
| 36 | 2737 | | 7350 | | 3660872 | 23 1 | 3278 | | 4543 | |
| 37 | 4156 | 23 7 | 8751 | 23 4 | 2255 | 23 0 | 4642 | | 5888 | |
| 38 | 5575 | 23 6 | 3580152 | 23 3 | 3637 | | 6005 | | 7232 | |
| 39 | 6993 | | 1552 | | 5019 | | 7369 | | 8576 | |
| 40 | 8411 | | 2952 | | 6401 | | 8732 | | 9920 | |
| 41 | 9829 | | 4352 | | 7782 | | 3750094 | | 3831263 | |
| 42 | 3501247 | | 5751 | | 9163 | | 1456 | | 2606 | |
| 43 | 2664 | | 7150 | | 3670544 | | 2818 | | 3949 | |
| 44 | 4081 | | 8549 | | 1924 | | 4180 | | 5292 | |
| 45 | 5498 | | 9948 | | 3304 | | 5541 | | 6634 | |
| 46 | 6914 | | 3591346 | | 4684 | | 6902 | | 7976 | |
| 47 | 8330 | | 2744 | | 6063 | | 8262 | | 9317 | |
| 48 | 9746 | | 4142 | | 7442 | | 9622 | | 3840658 | |
| 49 | 3511162 | | 5539 | | 8821 | | 3760982 | | 1999 | 22 4 |
| 50 | 2577 | | 6936 | | 3680200 | | 2342 | | 3340 | 22 3 |
| 51 | 3992 | | 8333 | | 1578 | | 3701 | | 4680 | |
| 52 | 5406 | | 9729 | | 2956 | | 5060 | | 6020 | |
| 53 | 6820 | | 3601124 | | 4334 | | 6419 | 22 7 | 7359 | |
| 54 | 8234 | | 2521 | | 5711 | | 7778 | 22 6 | 8698 | |
| 55 | 9648 | | 3917 | | 7088 | 23 0 | 9136 | | 3850037 | |
| 56 | 3521061 | | 5312 | | 8464 | 22 9 | 3770494 | | 1375 | |
| 57 | 2474 | | 6707 | 23 3 | 9841 | | 1851 | | 2713 | |
| 58 | 3887 | | 8102 | 23 2 | 3691217 | | 3208 | | 4051 | |
| 59 | 5300 | 23 6 | 9496 | | 2593 | 22 9 | 4564 | 22 6 | 5389 | 22 3 |
| 60 | 3526712 | 23 6 | 3610890 | 23 2 | 3693969 | 22 9 | 3775922 | 22 6 | 3856726 | 22 3 |

|  | 40 |  | 41 |  | 42 |  | 43 |  | 44 |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Sinus |  | Sinus |  | Sinus |  | Sinus |  | Sinus |  |  |
| 1 | 3858063 | 22 3 | 3937671 | 22 0 | 4016081 | 21 6 | 4093266 | 21 3 | 4169205 | 20 9 | 1 |
| 2 | 9399 | 22 3 | 8988 | 22 0 | 7377 | 21 6 | 4542 | 21 3 | 4170460 | 20 9 | 2 |
| 3 | 3860735 |  | 3940304 | 21 9 | 8673 |  | 5818 |  | 1715 |  | 3 |
| 4 | 2071 |  | 1620 |  | 9969 |  | 7093 | 21 3 | 2969 |  | 4 |
| 5 | 3407 |  | 2936 |  | 4021265 |  | 8368 | 21 2 | 4223 |  | 5 |
| 6 | 4742 |  | 4251 |  | 2560 |  | 9642 |  | 5476 |  | 6 |
| 7 | 6077 | 22 3 | 5566 |  | 3855 |  | 4100916 |  | 6729 |  | 7 |
| 8 | 7412 | 22 2 | 6881 |  | 5149 |  | 2190 |  | 7982 |  | 8 |
| 9 | 8746 |  | 8195 |  | 6443 |  | 3464 |  | 9235 |  | 9 |
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| 12 | 2746 |  | 2136 |  | 4030323 |  | 7282 |  | 2989 |  | 12 |
| 13 | 4079 |  | 3449 |  | 1616 | 21 6 | 8554 |  | 4240 |  | 13 |
| 14 | 5412 |  | 4762 |  | 2909 | 21 5 | 9826 |  | 5491 | 20 9 | 14 |
| 15 | 6744 |  | 6075 |  | 4201 |  | 4111098 |  | 6742 | 20 8 | 15 |
| 16 | 8076 |  | 7387 |  | 5492 |  | 2369 |  | 7992 |  | 16 |
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| 18 | 3880738 |  | 3960010 |  | 8074 |  | 4910 |  | 4190490 |  | 18 |
| 19 | 2069 |  | 1321 | 21 9 | 9365 |  | 6180 |  | 1739 |  | 19 |
| 20 | 3400 |  | 2632 | 21 8 | 4040656 |  | 7450 |  | 2988 |  | 20 |
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| 22 | 6060 |  | 5252 |  | 3236 |  | 9988 | 21 2 | 5484 |  | 22 |
| 23 | 7390 |  | 6562 |  | 4525 |  | 4121257 | 21 1 | 6732 |  | 23 |
| 24 | 8719 |  | 7871 |  | 5814 |  | 2525 |  | 7979 |  | 24 |
| 25 | 3890048 | 22 2 | 9180 |  | 7103 |  | 3793 |  | 9226 |  | 25 |
| 26 | 1377 | 22 1 | 3970489 |  | 8391 |  | 5060 |  | 4200472 |  | 26 |
| 27 | 2705 |  | 1797 |  | 9679 |  | 6327 |  | 1718 |  | 27 |
| 28 | 4033 |  | 3105 |  | 4050967 |  | 7594 |  | 2964 |  | 28 |
| 29 | 5361 |  | 4413 |  | 2254 |  | 8861 |  | 4210 | 20 8 | 29 |
| 30 | 6688 |  | 5721 |  | 3541 | 21 5 | 4130127 |  | 5455 | 20 7 | 30 |
| 31 | 8015 |  | 7028 |  | 4828 | 21 4 | 1393 |  | 6699 |  | 31 |
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| 33 | 3900668 |  | 9641 |  | 7400 |  | 3923 |  | 9187 |  | 33 |
| 34 | 1994 |  | 3980947 |  | 8686 |  | 5188 |  | 4210431 |  | 34 |
| 35 | 3320 |  | 2253 |  | 9971 |  | 6453 |  | 1675 |  | 35 |
| 36 | 4645 |  | 3558 |  | 4061256 |  | 7717 |  | 2918 |  | 36 |
| 37 | 5970 |  | 4863 | 21 8 | 2540 |  | 8981 |  | 4160 |  | 37 |
| 38 | 7295 |  | 6168 | 21 7 | 3824 |  | 4140244 |  | 5402 |  | 38 |
| 39 | 8619 |  | 7472 |  | 5108 |  | 1507 | 21 1 | 6644 |  | 39 |
| 40 | 9943 |  | 8776 |  | 6392 |  | 2770 | 21 0 | 7886 |  | 40 |
| 41 | 3911266 |  | 3990080 |  | 7675 |  | 4032 |  | 9127 |  | 41 |
| 42 | 2589 |  | 1383 |  | 8958 |  | 5294 |  | 4220368 |  | 42 |
| 43 | 3912 |  | 2686 |  | 4070240 |  | 6556 |  | 1608 |  | 43 |
| 44 | 5235 | 22 1 | 3989 |  | 1522 |  | 7817 |  | 2848 |  | 44 |
| 45 | 6558 | 22 0 | 5290 |  | 2804 |  | 9078 |  | 4088 |  | 45 |
| 46 | 7880 |  | 6593 |  | 4086 |  | 4150338 |  | 5327 |  | 46 |
| 47 | 9202 |  | 7894 |  | 5367 | 21 4 | 1598 |  | 6566 | 20 7 | 47 |
| 48 | 3920523 |  | 9195 |  | 6648 | 21 3 | 2858 |  | 7805 | 20 6 | 48 |
| 49 | 1844 |  | 4000496 |  | 7928 |  | 4118 |  | 9043 |  | 49 |
| 50 | 3165 |  | 1797 |  | 9208 |  | 5377 |  | 4230281 |  | 50 |
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| 55 | 9764 |  | 8295 | 21 7 | 5603 |  | 1668 |  | 6465 |  | 55 |
| 56 | 3931081 |  | 9594 | 21 6 | 6881 |  | 2925 | 21 0 | 7701 |  | 56 |
| 57 | 2401 |  | 4010892 |  | 8159 |  | 4182 | 20 9 | 8936 |  | 57 |
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| 59 | 5037 | 22 0 | 3488 | 21 6 | 4090713 | 21 3 | 6694 |  | 1406 | 20 6 | 59 |
| 60 | 3936354 | 22 0 | 4014784 | 21 6 | 4091990 | 21 3 | 4167950 | 20 9 | 4242641 | 20 6 | 60 |

|  | 45 Sinus |  | 46 Sinus |  | 47 Sinus |  | 48 Sinus |  | 49 Sinus |  |  |
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| 1 | 4243875 | 206 | 4317251 | 202 | 4389312 | 198 | 4460036 | 195 | 4529403 | 191 | 1 |
| 2 | 5109 | 206 | 8463 | 202 | 4390502 | 198 | 1203 |  | 4530547 | 191 | 2 |
| 3 | 6342 |  | 9674 |  | 1691 |  | 2370 | 195 | 1691 |  | 3 |
| 4 | 7575 |  | 4320885 |  | 2880 |  | 3537 | 194 | 2835 |  | 4 |
| 5 | 8808 | 205 | 2096 |  | 4069 |  | 4703 |  | 3978 |  | 5 |
| 6 | 4250040 |  | 3306 |  | 5257 |  | 5869 |  | 5121 | 190 | 6 |
| 7 | 1272 |  | 4516 |  | 6445 |  | 7034 |  | 6263 |  | 7 |
| 8 | 2503 |  | 5726 |  | 7633 |  | 8199 |  | 7405 |  | 8 |
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| 10 | 4965 |  | 8144 | 202 | 4400007 |  | 4470528 |  | 9689 |  | 10 |
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| 12 | 7425 |  | 4330561 |  | 2379 |  | 2855 |  | 1970 |  | 12 |
| 13 | 8655 |  | 1769 |  | 3565 |  | 4018 |  | 3110 |  | 13 |
| 14 | 9884 |  | 2977 |  | 4750 |  | 5181 |  | 4250 |  | 14 |
| 15 | 4261113 |  | 4184 |  | 5935 | 198 | 6344 |  | 5390 |  | 15 |
| 16 | 2341 |  | 5391 |  | 7120 | 197 | 7506 |  | 6529 |  | 16 |
| 17 | 3569 |  | 6597 |  | 8304 |  | 8667 |  | 7667 |  | 17 |
| 18 | 4797 |  | 7803 |  | 9488 |  | 9828 |  | 8805 |  | 18 |
| 19 | 6025 |  | 9009 |  | 4410672 |  | 4480989 | 194 | 9943 |  | 19 |
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| 21 | 8479 | 204 | 1419 |  | 3036 |  | 3310 |  | 2218 | 190 | 21 |
| 22 | 9705 |  | 2623 |  | 4218 |  | 4470 |  | 3355 | 189 | 22 |
| 23 | 4270931 |  | 3827 |  | 5400 |  | 5629 |  | 4491 |  | 23 |
| 24 | 2157 |  | 5031 |  | 6582 |  | 6788 |  | 5627 |  | 24 |
| 25 | 3382 |  | 6235 | 201 | 7764 |  | 7947 |  | 6763 |  | 25 |
| 26 | 4607 |  | 7438 | 200 | 8944 |  | 9105 |  | 7898 |  | 26 |
| 27 | 5831 |  | 8640 |  | 4420124 |  | 4490263 |  | 9033 |  | 27 |
| 28 | 7055 |  | 9842 |  | 1304 |  | 1420 |  | 4560168 |  | 28 |
| 29 | 8279 |  | 4351044 |  | 2484 |  | 2577 |  | 1302 |  | 29 |
| 30 | 9503 |  | 2246 |  | 3664 | 197 | 3734 |  | 2436 |  | 30 |
| 31 | 4280726 |  | 3447 |  | 4843 | 196 | 4890 |  | 3569 |  | 31 |
| 32 | 1949 |  | 4648 |  | 6021 |  | 6046 |  | 4702 |  | 32 |
| 33 | 3171 |  | 5848 |  | 7199 |  | 7202 |  | 5835 |  | 33 |
| 34 | 4393 |  | 7048 |  | 8377 |  | 8357 | 193 | 6967 |  | 34 |
| 35 | 5615 |  | 8248 |  | 9555 |  | 9512 | 192 | 8099 |  | 35 |
| 36 | 6836 |  | 9447 |  | 4430732 |  | 4500666 |  | 9230 |  | 36 |
| 37 | 8057 | 204 | 4360646 |  | 1909 |  | 1820 |  | 4570361 | 189 | 37 |
| 38 | 9278 | 203 | 1845 |  | 3085 |  | 2974 |  | 1492 | 188 | 38 |
| 39 | 4290498 |  | 3043 |  | 4261 |  | 4127 |  | 2622 |  | 39 |
| 40 | 1718 |  | 4241 |  | 5437 |  | 5280 |  | 3752 |  | 40 |
| 41 | 2937 |  | 5439 |  | 6612 |  | 6432 |  | 4881 |  | 41 |
| 42 | 4156 |  | 6636 |  | 7787 |  | 7584 |  | 6010 |  | 42 |
| 43 | 5375 |  | 7833 | 200 | 8961 |  | 8736 |  | 7139 |  | 43 |
| 44 | 6594 |  | 9030 | 199 | 4440135 |  | 9888 |  | 8267 |  | 44 |
| 45 | 7812 |  | 4370226 |  | 1309 |  | 4511039 |  | 9395 |  | 45 |
| 46 | 9030 |  | 1422 |  | 2482 |  | 2189 |  | 4580522 |  | 46 |
| 47 | 4300247 |  | 2617 |  | 3655 | 196 | 3339 |  | 1649 |  | 47 |
| 48 | 1464 |  | 3812 |  | 4828 | 195 | 4489 |  | 2776 |  | 48 |
| 49 | 2681 |  | 5007 |  | 6000 |  | 5639 |  | 3903 |  | 49 |
| 50 | 3897 |  | 6201 |  | 7172 |  | 6788 | 192 | 5029 |  | 50 |
| 51 | 5113 |  | 7395 |  | 8343 |  | 7937 | 191 | 6155 |  | 51 |
| 52 | 6328 |  | 8588 |  | 9514 |  | 9086 |  | 7280 | 188 | 52 |
| 53 | 7543 |  | 9781 |  | 4450685 |  | 4520233 |  | 8405 | 187 | 53 |
| 54 | 8758 | 203 | 4380974 |  | 1855 |  | 1381 |  | 9529 |  | 54 |
| 55 | 9973 | 202 | 2166 |  | 3025 |  | 2528 |  | 4590653 |  | 55 |
| 56 | 4311187 |  | 3358 |  | 4194 |  | 3675 |  | 1776 |  | 56 |
| 57 | 2400 |  | 4549 |  | 5363 |  | 4821 |  | 2899 |  | 57 |
| 58 | 3613 |  | 5740 |  | 6532 |  | 5967 |  | 4022 |  | 58 |
| 59 | 4826 | 202 | 6931 | 199 | 7701 | 195 | 7113 | 191 | 5145 | 187 | 59 |
| 60 | 4316039 | 202 | 4388122 | 199 | 4458869 | 195 | 4528258 | 191 | 4596267 | 187 | 60 |

| | 50 Sinus | | 51 Sinus | | 52 Sinus | | 53 Sinus | | 54 Sinus | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4597389 | 187 | 4663974 | 183 | 4729138 | 179 | 4792863 | 175 | 4855128 | 171 | 1 |
| 2 | 4598510 | 187 | 5072 | 183 | 4730212 | 179 | 3913 | 175 | 6153 | 171 | 2 |
| 3 | 4599631 | | 6169 | | 1286 | | 4962 | | 7178 | | 3 |
| 4 | 4600751 | | 7266 | | 2359 | | 6011 | | 8202 | | 4 |
| 5 | 1871 | | 8363 | | 3432 | | 7060 | | 9226 | | 5 |
| 6 | 2991 | | 9459 | | 4504 | | 8108 | | 4860250 | | 6 |
| 7 | 4110 | | 4670555 | | 5576 | | 9156 | | 1273 | 171 | 7 |
| 8 | 5229 | 187 | 1650 | | 6648 | | 4800203 | | 2296 | 170 | 8 |
| 9 | 6348 | 186 | 2745 | 183 | 7719 | 179 | 1250 | 175 | 3311 | | 9 |
| 10 | 7466 | | 3840 | 182 | 8790 | 178 | 2297 | 174 | 4340 | | 10 |
| 11 | 8584 | | 4934 | | 9860 | | 3343 | | 5362 | | 11 |
| 12 | 9701 | | 6028 | | 4740930 | | 4389 | | 6383 | | 12 |
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| 15 | 3051 | | 9308 | | 4137 | | 7523 | | 9444 | | 15 |
| 16 | 4167 | | 4680400 | | 5204 | | 8567 | | 4870463 | | 16 |
| 17 | 5282 | | 1492 | | 6273 | | 9611 | | 1482 | | 17 |
| 18 | 6397 | | 2584 | | 7341 | | 4810654 | | 2501 | | 18 |
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| 20 | 8626 | | 4766 | | 9474 | | 2739 | | 4537 | | 20 |
| 21 | 9740 | | 5856 | | 4750541 | | 3781 | | 5554 | | 21 |
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| 23 | 1966 | 185 | 8035 | | 2673 | | 5864 | 174 | 7588 | 169 | 23 |
| 24 | 3079 | | 9124 | 182 | 3738 | 178 | 6984 | 173 | 8604 | | 24 |
| 25 | 4191 | | 4690213 | 181 | 4803 | 177 | 7945 | | 9620 | | 25 |
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| 37 | 7509 | | 3246 | | 7548 | | 4830398 | | 1777 | 168 | 37 |
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| 40 | 4640829 | | 6494 | 180 | 4770724 | 176 | 3502 | | 4807 | | 40 |
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| 60 | 4662876 | 183 | 4728064 | 179 | 4791813 | 175 | 4854102 | 171 | 4914912 | 167 | 60 |

| | 55 Sinus | | 56 Sinus | | 57 Sinus | | 58 Sinus | | 59 Sinus | | |
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| 2 | 6913 | 167 | 6177 | 163 | 3923 | 158 | 5090138 | | 4800 | 150 | 2 |
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| 17 | 1870 | | 4990756 | 162 | 8122 | | 3950 | | 8222 | | 17 |
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| 32 | 6733 | | 5241 | 160 | 2223 | | 7644 | | 1555 | 148 | 32 |
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| 34 | 8708 | 164 | 7164 | | 4096 | | 9485 | | 3314 | | 34 |
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| 55 | 9341 | | 7264 | | 3659 | 155 | 8503 | | 1784 | | 55 |
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| 60 | 4974226 | 163 | 5032023 | 159 | 5088289 | 154 | 5143003 | 150 | 5196142 | 146 | 60 |

| | 60 Sinus | | 61 Sinus | | 62 Sinus | | 63 Sinus | | 64 Sinus | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
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| 2 | 7896 | 145 | 9409 | 141 | 9324 | 137 | 7623 | 132 | 4294 | 127 | 2 |
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| 13 | 7460 | 145 | 8680 | | 8300 | | 6301 | | 2672 | | 13 |
| 14 | 8327 | 144 | 9520 | | 9113 | 136 | 7087 | | 3431 | 127 | 14 |
| 15 | 9193 | | 5260360 | | 9926 | 135 | 7873 | | 4190 | 126 | 15 |
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| 21 | 4382 | | 5388 | | 4794 | | 2578 | 131 | 8732 | | 21 |
| 22 | 5245 | | 6224 | 140 | 5604 | | 3361 | 130 | 9487 | | 22 |
| 23 | 6108 | | 7061 | 139 | 6413 | | 4143 | | 5410242 | | 23 |
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| 26 | 8693 | 144 | 9567 | | 8838 | | 6487 | | 2503 | 126 | 26 |
| 27 | 9554 | 143 | 5270401 | | 9645 | | 7267 | | 3256 | 125 | 27 |
| 28 | 5220414 | | 1234 | | 5320452 | 135 | 8047 | | 4008 | | 28 |
| 29 | 1274 | | 2069 | | 1259 | 134 | 8826 | | 4760 | | 29 |
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| 34 | 5568 | | 6231 | | 5285 | | 2716 | 130 | 8514 | | 34 |
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| 38 | 8995 | | 9551 | | 8497 | | 5820 | | 1508 | | 38 |
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| 40 | 5230706 | 143 | 1209 | | 5330102 | | 7370 | | 3002 | 124 | 40 |
| 41 | 1561 | 142 | 2037 | | 0903 | 134 | 8144 | | 3749 | | 41 |
| 42 | 2415 | | 2864 | | 1704 | 133 | 8918 | | 4495 | | 42 |
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| 47 | 6681 | | 6996 | | 5700 | | 2779 | 129 | 8219 | | 47 |
| 48 | 7533 | | 7821 | 138 | 6498 | | 3550 | 128 | 8962 | | 48 |
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| 53 | 1784 | | 1940 | | 5340462 | | 7395 | | 2672 | 124 | 53 |
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| | 65 Sinus | | 66 Sinus | | 67 Sinus | | 68 Sinus | | 69 Sinus | | |
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| 9 | 4467 | | 7642 | | 9147 | | 8968 | | 7094 | 104 | 9 |
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5590147

101

| | 70 | | 71 | | 72 | | 73 | | 74 | | |
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| 2 | 9348 | 99 | 4248 | 95 | 7417 | 90 | 8849 | 85 | 8531 | 80 | 2 |
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| 46 | 5110 | | 8741 | | 0637 | | 0787 | | 9183 | 76 | 46 |
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| 58 | 1974 | | 5259 | | 6807 | | 6607 | | 4651 | 75 | 58 |
| 59 | 2543 | 95 | 5799 | 90 | 7318 | 85 | 7089 | | 5103 | | 59 |
| 60 | 5673112 | 95 | 5706339 | 90 | 5737829 | 85 | 5767570 | 80 | 5795555 | 75 | 60 |

| | 75 | | 76 | | 77 | | 78 | | 79 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sinus | | Sinus | | Sinus | | Sinus | | Sinus | | |
| 1 | 5796006 | 75 | 5822196 | 70 | 5846613 | 65 | 5869248 | 60 | 5890097 | 56 | 1 |
| 2 | 6457 | 75 | 2618 | 70 | 7005 | 65 | 9610 | 60 | 0429 | 55 | 2 |
| 3 | 6908 | | 3039 | | 7396 | | 9972 | | 0761 | 55 | 3 |
| 4 | 7358 | | 3459 | | 7787 | | 5870333 | | 1092 | | 4 |
| 5 | 7808 | | 3879 | | 8178 | | 0694 | | 1423 | | 5 |
| 6 | 8257 | | 4298 | | 8568 | | 1054 | | 1753 | | 6 |
| 7 | 8706 | | 4717 | | 8957 | | 1414 | | 2083 | | 7 |
| 8 | 9154 | | 5136 | | 9346 | | 1773 | | 2412 | | 8 |
| 9 | 9601 | 75 | 5554 | | 9734 | | 2132 | | 2741 | | 9 |
| 10 | 5800048 | 74 | 5972 | | 5850122 | | 2490 | | 3069 | | 10 |
| 11 | 0494 | | 6389 | 70 | 0509 | 65 | 2847 | | 3397 | | 11 |
| 12 | 0940 | | 6806 | 69 | 0896 | 64 | 3204 | 60 | 3724 | 55 | 12 |
| 13 | 1386 | | 7222 | | 1282 | | 3561 | 59 | 4051 | 54 | 13 |
| 14 | 1831 | | 7637 | | 1668 | | 3917 | | 4377 | | 14 |
| 15 | 2276 | | 8052 | | 2054 | | 4273 | | 4703 | | 15 |
| 16 | 2720 | | 8466 | | 2439 | | 4628 | | 5028 | | 16 |
| 17 | 3164 | | 8880 | | 2824 | | 4983 | | 5353 | | 17 |
| 18 | 3607 | | 9294 | | 3208 | | 5337 | | 5677 | | 18 |
| 19 | 4050 | | 9707 | | 3591 | | 5691 | | 6001 | | 19 |
| 20 | 4492 | | 5830120 | | 3974 | | 6044 | | 6324 | | 20 |
| 21 | 4933 | | 0532 | | 4356 | | 6396 | | 6647 | | 21 |
| 22 | 5374 | 74 | 0944 | 69 | 4738 | | 6748 | | 6969 | | 22 |
| 23 | 5814 | 73 | 1355 | 68 | 5119 | | 7100 | | 7291 | | 23 |
| 24 | 6255 | | 1766 | | 5500 | 64 | 7451 | 59 | 7612 | 54 | 24 |
| 25 | 6695 | | 2176 | | 5880 | 63 | 7802 | 58 | 7933 | 53 | 25 |
| 26 | 5807134 | | 2586 | | 6261 | | 8152 | | 8253 | | 26 |
| 27 | 7573 | | 2995 | | 6641 | | 8502 | | 8573 | | 27 |
| 28 | 8011 | | 3404 | | 7020 | | 8851 | | 8892 | | 28 |
| 29 | 8449 | | 3812 | | 7398 | | 9200 | | 9211 | | 29 |
| 30 | 8886 | | 4220 | | 7776 | | 9548 | | 9529 | | 30 |
| 31 | 9323 | | 4627 | | 8153 | | 9896 | | 9847 | | 31 |
| 32 | 9759 | | 5034 | | 8530 | | 5880243 | | 5900164 | | 32 |
| 33 | 5810194 | | 5440 | | 8907 | | 0590 | | 0481 | | 33 |
| 34 | 0639 | 73 | 5846 | | 9283 | | 0936 | | 0797 | | 34 |
| 35 | 1065 | 72 | 6251 | 68 | 9659 | | 1282 | | 1113 | | 35 |
| 36 | 1499 | | 6656 | 67 | 5860034 | 63 | 1627 | 58 | 1428 | 53 | 36 |
| 37 | 1933 | | 7060 | | 0409 | 62 | 1972 | 57 | 1743 | 52 | 37 |
| 38 | 2366 | | 7464 | | 0783 | | 2316 | | 2057 | | 38 |
| 39 | 2799 | | 7867 | | 1156 | | 2660 | | 2371 | | 39 |
| 40 | 3231 | | 8270 | | 1529 | | 3003 | | 2684 | | 40 |
| 41 | 3663 | | 8672 | | 1901 | | 3346 | | 2997 | | 41 |
| 42 | 4094 | | 9074 | | 2273 | | 3688 | | 3309 | | 42 |
| 43 | 4525 | | 9475 | | 2645 | | 4030 | | 3621 | | 43 |
| 44 | 4955 | | 9876 | | 3016 | | 4371 | | 3932 | | 44 |
| 45 | 5385 | | 5840276 | | 3387 | | 4712 | | 4243 | | 45 |
| 46 | 5814 | 72 | 0676 | | 3757 | | 5052 | | 4553 | | 46 |
| 47 | 6243 | 71 | 1075 | 67 | 4127 | | 5392 | | 4863 | | 47 |
| 48 | 6671 | | 1474 | 66 | 4496 | 62 | 5731 | | 5172 | | 48 |
| 49 | 7099 | | 1872 | | 4865 | 61 | 6070 | 57 | 5481 | 52 | 49 |
| 50 | 7527 | | 2270 | | 5233 | | 6409 | 56 | 5790 | 51 | 50 |
| 51 | 7954 | | 2667 | | 5600 | | 6747 | | 6098 | | 51 |
| 52 | 8381 | | 3064 | | 5967 | | 7084 | | 6405 | | 52 |
| 53 | 8807 | | 3460 | | 6334 | | 7421 | | 6712 | | 53 |
| 54 | 9233 | | 3856 | | 6700 | | 7757 | | 7018 | | 54 |
| 55 | 9657 | | 4252 | | 7066 | | 8093 | | 7324 | | 55 |
| 56 | 5820081 | | 4647 | | 7431 | | 8428 | | 7629 | | 56 |
| 57 | 0505 | | 5043 | | 7796 | | 8763 | | 7934 | | 57 |
| 58 | 0928 | | 5435 | | 8160 | | 9097 | | 8238 | | 58 |
| 59 | 1351 | 71 | 5828 | 66 | 8523 | | 9431 | 56 | 8542 | 51 | 59 |
| 60 | 5821774 | 71 | 5846221 | 66 | 5868886 | 61 | 5889764 | 56 | 5908845 | 51 | 60 |

6251

| | 80 Sinus | | 81 Sinus | | 82 Sinus | | 83 Sinus | | 84 Sinus | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5909148 | 51 | 5926403 | 46 | 5941850 | 40 | 5955489 | 35 | 5967313 | 30 | 1 |
| 2 | 9450 | 50 | 6675 | | 2092 | 40 | 5701 | 35 | 7495 | 30 | 2 |
| 3 | 9752 | | 6947 | 45 | 2334 | | 5912 | | 7676 | | 3 |
| 4 | 5910053 | | 7218 | | 2575 | | 6123 | | 7857 | | 4 |
| 5 | 0354 | | 7489 | | 2816 | | 6334 | | 8037 | | 5 |
| 6 | 0654 | | 7759 | | 3056 | | 6544 | | 8216 | | 6 |
| 7 | 0954 | | 8029 | | 3296 | | 6754 | | 8395 | | 7 |
| 8 | 1253 | | 8298 | | 3535 | | 6963 | | 8574 | | 8 |
| 9 | 1552 | | 8567 | | 3774 | | 7171 | | 8852 | | 9 |
| 10 | 1851 | | 8835 | | 4012 | | 7379 | | 8930 | | 10 |
| 11 | 2149 | | 9103 | | 4249 | | 7586 | 35 | 9107 | 30 | 11 |
| 12 | 2447 | 50 | 9370 | 45 | 4486 | 40 | 7793 | 34 | 9284 | 29 | 12 |
| 13 | 2744 | 49 | 9637 | 44 | 4723 | 39 | 7999 | | 9460 | | 13 |
| 14 | 3040 | | 9903 | | 4959 | | 8205 | | 9636 | | 14 |
| 15 | 3336 | | 5930169 | | 5135 | | 8411 | | 9811 | | 15 |
| 16 | 3631 | | 0434 | | 5430 | | 8616 | | 5969985 | | 16 |
| 17 | 3926 | | 0699 | | 5665 | | 8820 | | 5970159 | | 17 |
| 18 | 4220 | | 0963 | | 5899 | | 9024 | | 0333 | | 18 |
| 19 | 4514 | | 1227 | | 6132 | | 9227 | | 0506 | | 19 |
| 20 | 4808 | | 1490 | | 6365 | | 9430 | | 0679 | | 20 |
| 21 | 5101 | | 1753 | | 6597 | | 9632 | | 0851 | | 21 |
| 22 | 5393 | | 2015 | | 6829 | | 9834 | | 1023 | 29 | 22 |
| 23 | 5685 | | 2277 | | 7061 | | 5960035 | | 1194 | 28 | 23 |
| 24 | 5976 | 49 | 2538 | 44 | 7292 | 39 | 0236 | 34 | 1364 | | 24 |
| 25 | 6267 | 48 | 2799 | 43 | 7523 | 38 | 0437 | 33 | 1534 | | 25 |
| 26 | 6557 | | 3059 | | 7753 | | 0637 | | 1703 | | 26 |
| 27 | 6847 | | 3319 | | 7983 | | 0836 | | 1872 | | 27 |
| 28 | 7136 | | 3578 | | 8212 | | 1035 | | 2041 | | 28 |
| 29 | 7425 | | 3837 | | 8441 | | 1233 | | 2209 | | 29 |
| 30 | 7714 | | 4095 | | 8669 | | 1431 | | 2377 | | 30 |
| 31 | 8002 | | 4352 | | 8896 | | 1628 | | 2544 | | 31 |
| 32 | 8289 | | 4609 | | 9123 | | 1825 | | 2711 | | 32 |
| 33 | 8576 | | 4866 | | 9350 | | 2021 | | 2877 | | 33 |
| 34 | 8862 | | 5122 | | 9576 | | 2217 | | 3042 | 28 | 34 |
| 35 | 9148 | | 5378 | | 9802 | | 2413 | 33 | 3207 | 27 | 35 |
| 36 | 9433 | 48 | 5633 | 43 | 5950027 | 38 | 2608 | 32 | 3371 | | 36 |
| 37 | 9718 | 47 | 5888 | 42 | 0252 | 37 | 2802 | | 3535 | | 37 |
| 38 | 5920002 | | 6142 | | 0476 | | 2996 | | 3699 | | 38 |
| 39 | 0286 | | 6396 | | 0699 | | 3189 | | 3863 | | 39 |
| 40 | 0570 | | 6649 | | 0922 | | 3382 | | 4025 | | 40 |
| 41 | 0853 | | 6902 | | 1144 | | 3574 | | 4187 | | 41 |
| 42 | 1135 | | 7154 | | 1366 | | 3766 | | 4349 | | 42 |
| 43 | 1417 | | 7406 | | 1588 | | 3957 | | 4510 | | 43 |
| 44 | 1698 | | 7657 | | 1809 | | 4148 | | 4670 | | 44 |
| 45 | 1979 | | 7908 | | 2030 | | 4338 | | 4830 | | 45 |
| 46 | 2259 | | 8158 | | 2250 | | 4528 | | 4989 | | 46 |
| 47 | 2539 | | 8408 | | 2470 | 37 | 4717 | 32 | 5148 | 27 | 47 |
| 48 | 2818 | 47 | 8657 | 42 | 2689 | 36 | 4906 | 31 | 5306 | 26 | 48 |
| 49 | 3097 | 46 | 8906 | 41 | 2907 | | 5094 | | 5464 | | 49 |
| 50 | 3375 | | 9154 | | 3125 | | 5282 | | 5622 | | 50 |
| 51 | 3653 | | 9401 | | 3342 | | 5469 | | 5779 | | 51 |
| 52 | 3930 | | 9648 | | 3559 | | 5656 | | 5936 | | 52 |
| 53 | 4207 | | 9895 | | 3775 | | 5842 | | 6092 | | 53 |
| 54 | 4483 | | 5940141 | | 3991 | | 6028 | | 6247 | | 54 |
| 55 | 4759 | | 0387 | | 4207 | | 6213 | | 6402 | | 55 |
| 56 | 5034 | | 0632 | | 4422 | | 6397 | | 6556 | | 56 |
| 57 | 5309 | | 0877 | | 4637 | | 6581 | | 6710 | | 57 |
| 58 | 5583 | | 1121 | | 4851 | | 6765 | | 6863 | | 58 |
| 59 | 5857 | 46 | 1365 | 41 | 5064 | 36 | 6948 | 31 | 7016 | 26 | 59 |
| 60 | 5926130 | 46 | 5941608 | 41 | 5955277 | 36 | 5967131 | 31 | 5977169 | 26 | 60 |

|  | 85 Sinus |  | 86 Sinus |  | 87 Sinus |  | 88 Sinus |  | 89 Sinus |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5977321 | 25 | 5985505 | 20 | 5991868 | 15 | 5996405 | 10 | 5999116 | 05 | 1 |
| 2 | 7472 | 25 | 5626 | 20 | 1959 | 15 | 465 | 10 | 146 | 05 | 2 |
| 3 | 7623 |  | 5747 |  | 2049 |  | 525 |  | 175 |  | 3 |
| 4 | 7773 |  | 5867 |  | 2138 |  | 584 |  | 204 |  | 4 |
| 5 | 7923 |  | 5987 |  | 2227 |  | 643 |  | 233 |  | 5 |
| 6 | 8072 |  | 6106 |  | 2315 |  | 701 |  | 260 |  | 6 |
| 7 | 8221 |  | 6225 |  | 2403 |  | 759 |  | 287 | 05 | 7 |
| 8 | 8369 |  | 6343 |  | 2491 |  | 816 | 10 | 314 | 04 | 8 |
| 9 | 8517 |  | 6460 | 20 | 2578 | 15 | 873 | 09 | 340 |  | 9 |
| 10 | 8665 | 25 | 6577 | 19 | 2665 | 14 | 929 |  | 366 |  | 10 |
| 11 | 8812 | 24 | 6693 |  | 2751 |  | 6984 |  | 391 |  | 11 |
| 12 | 8958 |  | 6809 |  | 2837 |  | 7039 |  | 416 |  | 12 |
| 13 | 9104 |  | 6924 |  | 2922 |  | 094 |  | 440 |  | 13 |
| 14 | 9249 |  | 7039 |  | 3006 |  | 148 |  | 463 |  | 14 |
| 15 | 9394 |  | 7154 |  | 3090 |  | 202 |  | 486 |  | 15 |
| 16 | 9538 |  | 7268 |  | 3173 |  | 255 |  | 508 |  | 16 |
| 17 | 9682 |  | 7382 |  | 3256 |  | 308 |  | 530 |  | 17 |
| 18 | 9825 |  | 7495 |  | 3338 |  | 360 |  | 552 |  | 18 |
| 19 | 5979968 |  | 7607 |  | 3420 |  | 411 | 09 | 573 | 04 | 19 |
| 20 | 5980110 |  | 7719 |  | 3502 |  | 462 | 08 | 594 | 03 | 20 |
| 21 | 0251 |  | 7830 | 19 | 3583 | 14 | 512 |  | 615 |  | 21 |
| 22 | 0392 | 24 | 7941 | 18 | 3664 | 13 | 562 |  | 634 |  | 22 |
| 23 | 0533 | 23 | 8051 |  | 3744 |  | 611 |  | 653 |  | 23 |
| 24 | 0673 |  | 8161 |  | 3823 |  | 660 |  | 671 |  | 24 |
| 25 | 0813 |  | 8271 |  | 3902 |  | 709 |  | 689 |  | 25 |
| 26 | 0952 |  | 8380 |  | 5993980 |  | 757 |  | 706 |  | 26 |
| 27 | 1091 |  | 8488 |  | 4058 |  | 808 |  | 723 |  | 27 |
| 28 | 1229 |  | 8596 |  | 4135 |  | 852 |  | 740 |  | 28 |
| 29 | 1367 |  | 8703 |  | 4212 |  | 898 |  | 756 |  | 29 |
| 30 | 1504 |  | 8810 |  | 4289 |  | 944 |  | 772 |  | 30 |
| 31 | 1640 |  | 8916 |  | 4364 |  | 5997989 | 08 | 787 | 03 | 31 |
| 32 | 1776 |  | 9022 |  | 440 | 13 | 8034 | 07 | 802 | 02 | 32 |
| 33 | 1912 |  | 127 | 18 | 515 | 12 | 078 |  | 816 |  | 33 |
| 34 | 2047 | 23 | 232 | 17 | 589 |  | 122 |  | 829 |  | 34 |
| 35 | 2182 | 22 | 336 |  | 663 |  | 166 |  | 842 |  | 35 |
| 36 | 2316 |  | 440 |  | 736 |  | 209 |  | 854 |  | 36 |
| 37 | 2450 |  | 543 |  | 809 |  | 251 |  | 866 |  | 37 |
| 38 | 2583 |  | 646 |  | 881 |  | 293 |  | 877 |  | 38 |
| 39 | 2716 |  | 748 |  | 4953 |  | 334 |  | 888 |  | 39 |
| 40 | 2848 |  | 850 |  | 5024 |  | 375 |  | 899 |  | 40 |
| 41 | 2979 |  | 99[illegible] |  | 096 |  | 415 |  | 909 |  | 41 |
| 42 | 3110 |  | 0052 |  | 166 |  | 455 |  | 918 | 02 | 42 |
| 43 | 3241 |  | 152 |  | 236 |  | 494 |  | 927 | 01 | 43 |
| 44 | 3371 |  | 252 | 17 | 305 | 12 | 533 | 07 | 935 |  | 44 |
| 45 | 3501 |  | 351 | 16 | 374 | 11 | 572 | 06 | 943 |  | 45 |
| 46 | 3630 | 22 | 449 |  | 442 |  | 610 |  | 951 |  | 46 |
| 47 | 3759 | 21 | 549 |  | 510 |  | 647 |  | 958 |  | 47 |
| 48 | 3887 |  | 645 |  | 577 |  | 684 |  | 964 |  | 48 |
| 49 | 4014 |  | 742 |  | 644 |  | 720 |  | 970 |  | 49 |
| 50 | 4141 |  | 839 |  | 710 |  | 756 |  | 975 |  | 50 |
| 51 | 4267 |  | 0934 |  | 776 |  | 791 |  | 980 |  | 51 |
| 52 | 4393 |  | 1031 |  | 841 |  | 826 |  | 984 |  | 52 |
| 53 | 4519 |  | 1126 |  | 906 |  | 860 |  | 988 |  | 53 |
| 54 | 4644 |  | 1220 |  | 4970 |  | 894 |  | 5999991 | 01 | 54 |
| 55 | 4769 |  | 314 |  | 5034 |  | 927 | 06 | 5999994 | 00 | 55 |
| 56 | 4893 |  | 407 |  | 097 | 11 | 960 | 05 | 5999996 | 00 | 56 |
| 57 | 5017 | 21 | 500 | 16 | 160 | 10 | 8992 |  | 5999998 | 00 | 57 |
| 58 | 5140 | 20 | 593 | 15 | 222 | 10 | 9024 |  | 5999999 | 00 | 58 |
| 59 | 5263 | 20 | 685 | 15 | 284 | 10 | 055 | 05 | 6000000 | 00 | 59 |
| 60 | 5985384 | 20 | 5991777 | 15 | 5996345 | 10 | 5999086 | 05 | 6000000 | 00 | 60 |

Finis tabularum Sinuum regalium Georgii peurbachii cum tabulis Johannis de monte regio artificiosorum virorum computatis ... ad suam cordam sine sensibili errore demonstratis cuius forme immortalis Jo Blanck. H B W

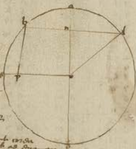
Notandum est quod per presentem tabellam sinus compositi sunt tabule directionum demptis duabus figuris a parte dextra et ideo semper dum per eam et tabulas predictas aliquid querere volueris debes abicere duas figuras a parte dextra. Hec enim tabula tota supponit sinum habere 6000000 milia partium. Unde ablatis duabus figuris nichilominus remanebunt 60000 milia partium sinus totius quem supponunt tabule directionum.

Si sinum rectum alicuius arcus [illegible] volueris invenire [illegible] arcus propositi in fronte tabule, a latere vero minuta [illegible] suscipe. Sic [illegible] tabule sinum rectum indicabit [illegible] ... Exemplum: esto arcus [illegible] 44 gradus 26 minuta 28 secunda [illegible] 4900846 [illegible] 44 gradus et 26 minuta [illegible] 28 2/3 [illegible] 168 [illegible] 333 [illegible] 8 2/3 [illegible] 16 [illegible] 278 [illegible] 266 [illegible] sinus arcus propositi [illegible] 4901522

Si autem ex sinu proposito arcum sibi correspondentem [illegible] ... [illegible] 4661868 [illegible] 1661642 [illegible] 96 [illegible] 22/32 [illegible] 10 [illegible] 4661868 [illegible] 17 [illegible] de tabulis [illegible]

Visis autem tabulis sinuum [illegible] 2070 [illegible] ... [illegible] 4029 [illegible] ... tabularum [illegible]

| | |
|---|---|
| a d | dyameter circuli |
| b a l | porcio circuli circumferencie |
| b n l | corda |
| b n | sinus [illegible] |
| a n | sinus versus |
| b p | sinus [illegible] |
| a o l | [illegible] circuli |
| a l | arcus [illegible] a o l |




Dyameter circuli est recta linea [illegible] ...

[illegible] corda [illegible] dyametro [illegible] ...

[illegible] sinus [illegible] dyameter [illegible] ...

[illegible]

| | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | 11 | | 12 | | 13 | | 14 | | 15 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 1 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 5 | 0 | 6 | 0 | 7 | 0 | 8 | 0 | 9 | 0 | 10 | 0 | 11 | 0 | 12 | 0 | 13 | 0 | 14 | 0 | 15 |
| 2 | 0 | 2 | 0 | 4 | 0 | 6 | 0 | 8 | 0 | 10 | 0 | 12 | 0 | 14 | 0 | 16 | 0 | 18 | 0 | 20 | 0 | 22 | 0 | 24 | 0 | 26 | 0 | 28 | 0 | 30 |
| 3 | 0 | 3 | 0 | 6 | 0 | 9 | 0 | 12 | 0 | 15 | 0 | 18 | 0 | 21 | 0 | 24 | 0 | 27 | 0 | 30 | 0 | 33 | 0 | 36 | 0 | 39 | 0 | 42 | 0 | 45 |
| 4 | 0 | 4 | 0 | 8 | 0 | 12 | 0 | 16 | 0 | 20 | 0 | 24 | 0 | 28 | 0 | 32 | 0 | 36 | 0 | 40 | 0 | 44 | 0 | 48 | 0 | 52 | 0 | 56 | 1 | 0 |
| 5 | 0 | 5 | 0 | 10 | 0 | 15 | 0 | 20 | 0 | 25 | 0 | 30 | 0 | 35 | 0 | 40 | 0 | 45 | 0 | 50 | 0 | 55 | 1 | 0 | 1 | 5 | 1 | 10 | 1 | 15 |
| 6 | 0 | 6 | 0 | 12 | 0 | 18 | 0 | 24 | 0 | 30 | 0 | 36 | 0 | 42 | 0 | 48 | 0 | 54 | 1 | 0 | 1 | 6 | 1 | 12 | 1 | 18 | 1 | 24 | 1 | 30 |
| 7 | 0 | 7 | 0 | 14 | 0 | 21 | 0 | 28 | 0 | 35 | 0 | 42 | 0 | 49 | 0 | 56 | 1 | 3 | 1 | 10 | 1 | 17 | 1 | 24 | 1 | 31 | 1 | 38 | 1 | 45 |
| 8 | 0 | 8 | 0 | 16 | 0 | 24 | 0 | 32 | 0 | 40 | 0 | 48 | 0 | 56 | 1 | 4 | 1 | 12 | 1 | 20 | 1 | 28 | 1 | 36 | 1 | 44 | 1 | 52 | 2 | 0 |
| 9 | 0 | 9 | 0 | 18 | 0 | 27 | 0 | 36 | 0 | 45 | 0 | 54 | 1 | 3 | 1 | 12 | 1 | 21 | 1 | 30 | 1 | 39 | 1 | 48 | 1 | 57 | 2 | 6 | 2 | 15 |
| 10 | 0 | 10 | 0 | 20 | 0 | 30 | 0 | 40 | 0 | 50 | 1 | 0 | 1 | 10 | 1 | 20 | 1 | 30 | 1 | 40 | 1 | 50 | 2 | 0 | 2 | 10 | 2 | 20 | 2 | 30 |
| 11 | 0 | 11 | 0 | 22 | 0 | 33 | 0 | 44 | 0 | 55 | 1 | 6 | 1 | 17 | 1 | 28 | 1 | 39 | 1 | 50 | 2 | 1 | 2 | 12 | 2 | 23 | 2 | 34 | 2 | 45 |
| 12 | 0 | 12 | 0 | 24 | 0 | 36 | 0 | 48 | 1 | 0 | 1 | 12 | 1 | 24 | 1 | 36 | 1 | 48 | 2 | 0 | 2 | 12 | 2 | 24 | 2 | 36 | 2 | 48 | 3 | 0 |
| 13 | 0 | 13 | 0 | 26 | 0 | 39 | 0 | 52 | 1 | 5 | 1 | 18 | 1 | 31 | 1 | 44 | 1 | 57 | 2 | 10 | 2 | 23 | 2 | 36 | 2 | 49 | 3 | 2 | 3 | 15 |
| 14 | 0 | 14 | 0 | 28 | 0 | 42 | 0 | 56 | 1 | 10 | 1 | 24 | 1 | 38 | 1 | 52 | 2 | 6 | 2 | 20 | 2 | 34 | 2 | 48 | 3 | 2 | 3 | 16 | 3 | 30 |
| 15 | 0 | 15 | 0 | 30 | 0 | 45 | 1 | 0 | 1 | 15 | 1 | 30 | 1 | 45 | 2 | 0 | 2 | 15 | 2 | 30 | 2 | 45 | 3 | 0 | 3 | 15 | 3 | 30 | 3 | 45 |
| 16 | 0 | 16 | 0 | 32 | 0 | 48 | 1 | 4 | 1 | 20 | 1 | 36 | 1 | 52 | 2 | 8 | 2 | 24 | 2 | 40 | 2 | 56 | 3 | 12 | 3 | 28 | 3 | 44 | 4 | 0 |
| 17 | 0 | 17 | 0 | 34 | 0 | 51 | 1 | 8 | 1 | 25 | 1 | 42 | 1 | 59 | 2 | 16 | 2 | 33 | 2 | 50 | 3 | 7 | 3 | 24 | 3 | 41 | 3 | 58 | 4 | 15 |
| 18 | 0 | 18 | 0 | 36 | 0 | 54 | 1 | 12 | 1 | 30 | 1 | 48 | 2 | 6 | 2 | 24 | 2 | 42 | 3 | 0 | 3 | 18 | 3 | 36 | 3 | 54 | 4 | 12 | 4 | 30 |
| 19 | 0 | 19 | 0 | 38 | 0 | 57 | 1 | 16 | 1 | 35 | 1 | 54 | 2 | 13 | 2 | 32 | 2 | 51 | 3 | 10 | 3 | 29 | 3 | 48 | 4 | 7 | 4 | 26 | 4 | 45 |
| 20 | 0 | 20 | 0 | 40 | 1 | 0 | 1 | 20 | 1 | 40 | 2 | 0 | 2 | 20 | 2 | 40 | 3 | 0 | 3 | 20 | 3 | 40 | 4 | 0 | 4 | 20 | 4 | 40 | 5 | 0 |
| 21 | 0 | 21 | 0 | 42 | 1 | 3 | 1 | 24 | 1 | 45 | 2 | 6 | 2 | 27 | 2 | 48 | 3 | 9 | 3 | 30 | 3 | 51 | 4 | 12 | 4 | 33 | 4 | 54 | 5 | 15 |
| 22 | 0 | 22 | 0 | 44 | 1 | 6 | 1 | 28 | 1 | 50 | 2 | 12 | 2 | 34 | 2 | 56 | 3 | 18 | 3 | 40 | 4 | 2 | 4 | 24 | 4 | 46 | 5 | 8 | 5 | 30 |
| 23 | 0 | 23 | 0 | 46 | 1 | 9 | 1 | 32 | 1 | 55 | 2 | 18 | 2 | 41 | 3 | 4 | 3 | 27 | 3 | 50 | 4 | 13 | 4 | 36 | 4 | 59 | 5 | 22 | 5 | 45 |
| 24 | 0 | 24 | 0 | 48 | 1 | 12 | 1 | 36 | 2 | 0 | 2 | 24 | 2 | 48 | 3 | 12 | 3 | 36 | 4 | 0 | 4 | 24 | 4 | 48 | 5 | 12 | 5 | 36 | 6 | 0 |
| 25 | 0 | 25 | 0 | 50 | 1 | 15 | 1 | 40 | 2 | 5 | 2 | 30 | 2 | 55 | 3 | 20 | 3 | 45 | 4 | 10 | 4 | 35 | 5 | 0 | 5 | 25 | 5 | 50 | 6 | 15 |
| 26 | 0 | 26 | 0 | 52 | 1 | 18 | 1 | 44 | 2 | 10 | 2 | 36 | 3 | 2 | 3 | 28 | 3 | 54 | 4 | 20 | 4 | 46 | 5 | 12 | 5 | 38 | 6 | 4 | 6 | 30 |
| 27 | 0 | 27 | 0 | 54 | 1 | 21 | 1 | 48 | 2 | 15 | 2 | 42 | 3 | 9 | 3 | 36 | 4 | 3 | 4 | 30 | 4 | 57 | 5 | 24 | 5 | 51 | 6 | 18 | 6 | 45 |
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| 29 | 0 | 29 | 0 | 58 | 1 | 27 | 1 | 56 | 2 | 25 | 2 | 54 | 3 | 23 | 3 | 52 | 4 | 21 | 4 | 50 | 5 | 19 | 5 | 48 | 6 | 17 | 6 | 46 | 7 | 15 |
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| 32 | 0 | 32 | 1 | 4 | 1 | 36 | 2 | 8 | 2 | 40 | 3 | 12 | 3 | 44 | 4 | 16 | 4 | 48 | 5 | 20 | 5 | 52 | 6 | 24 | 6 | 56 | 7 | 28 | 8 | 0 |
| 33 | 0 | 33 | 1 | 6 | 1 | 39 | 2 | 12 | 2 | 45 | 3 | 18 | 3 | 51 | 4 | 24 | 4 | 57 | 5 | 30 | 6 | 3 | 6 | 36 | 7 | 9 | 7 | 42 | 8 | 15 |
| 34 | 0 | 34 | 1 | 8 | 1 | 42 | 2 | 16 | 2 | 50 | 3 | 24 | 3 | 58 | 4 | 32 | 5 | 6 | 5 | 40 | 6 | 14 | 6 | 48 | 7 | 22 | 7 | 56 | 8 | 30 |
| 35 | 0 | 35 | 1 | 10 | 1 | 45 | 2 | 20 | 2 | 55 | 3 | 30 | 4 | 5 | 4 | 40 | 5 | 15 | 5 | 50 | 6 | 25 | 7 | 0 | 7 | 35 | 8 | 10 | 8 | 45 |
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| 37 | 0 | 37 | 1 | 14 | 1 | 51 | 2 | 28 | 3 | 5 | 3 | 42 | 4 | 19 | 4 | 56 | 5 | 33 | 6 | 10 | 6 | 47 | 7 | 24 | 8 | 1 | 8 | 38 | 9 | 15 |
| 38 | 0 | 38 | 1 | 16 | 1 | 54 | 2 | 32 | 3 | 10 | 3 | 48 | 4 | 26 | 5 | 4 | 5 | 42 | 6 | 20 | 6 | 58 | 7 | 36 | 8 | 14 | 8 | 52 | 9 | 30 |
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| 41 | 0 | 41 | 1 | 22 | 2 | 3 | 2 | 44 | 3 | 25 | 4 | 6 | 4 | 47 | 5 | 28 | 6 | 9 | 6 | 50 | 7 | 31 | 8 | 12 | 8 | 53 | 9 | 34 | 10 | 15 |
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| | 16 | | 17 | | 18 | | 19 | | 20 | | 21 | | 22 | | 23 | | 24 | | 25 | | 26 | | 27 | | 28 | | 29 | | 30 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 16 | 0 | 17 | 0 | 18 | 0 | 19 | 0 | 20 | 0 | 21 | 0 | 22 | 0 | 23 | 0 | 24 | 0 | 25 | 0 | 26 | 0 | 27 | 0 | 28 | 0 | 29 | 0 | 30 |
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| | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
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| 1 | 0 31 | 0 32 | 0 33 | 0 34 | 0 35 | 0 36 | 0 37 | 0 38 | 0 39 | 0 40 | 0 41 | 0 42 | 0 43 | 0 44 | 0 45 |
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| 3 | 1 33 | 1 36 | 1 39 | 1 42 | 1 45 | 1 48 | 1 51 | 1 54 | 1 57 | 2 0 | 2 3 | 2 6 | 2 9 | 2 12 | 2 15 |
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| 6 | 3 6 | 3 12 | 3 18 | 3 24 | 3 30 | 3 36 | 3 42 | 3 48 | 3 54 | 4 0 | 4 6 | 4 12 | 4 18 | 4 24 | 4 30 |
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| 36 | 18 36 | 19 12 | 19 48 | 20 24 | 21 0 | 21 36 | 22 12 | 22 48 | 23 24 | 24 0 | 24 36 | 25 12 | 25 48 | 26 24 | 27 0 |
| 37 | 19 7 | 19 44 | 20 21 | 20 58 | 21 35 | 22 12 | 22 49 | 23 26 | 24 3 | 24 40 | 25 17 | 25 54 | 26 31 | 27 8 | 27 45 |
| 38 | 19 38 | 20 16 | 20 54 | 21 32 | 22 10 | 22 48 | 23 26 | 24 4 | 24 42 | 25 20 | 25 58 | 26 36 | 27 14 | 27 52 | 28 30 |
| 39 | 20 9 | 20 48 | 21 27 | 22 6 | 22 45 | 23 24 | 24 3 | 24 42 | 25 21 | 26 0 | 26 39 | 27 18 | 27 57 | 28 36 | 29 15 |
| 40 | 20 40 | 21 20 | 22 0 | 22 40 | 23 20 | 24 0 | 24 40 | 25 20 | 26 0 | 26 40 | 27 20 | 28 0 | 28 40 | 29 20 | 30 0 |
| 41 | 21 11 | 21 52 | 22 33 | 23 14 | 23 55 | 24 36 | 25 17 | 25 58 | 26 39 | 27 20 | 28 1 | 28 42 | 29 23 | 30 4 | 30 45 |
| 42 | 21 42 | 22 24 | 23 6 | 23 48 | 24 30 | 25 12 | 25 54 | 26 36 | 27 18 | 28 0 | 28 42 | 29 24 | 30 6 | 30 48 | 31 30 |
| 43 | 22 13 | 22 56 | 23 39 | 24 22 | 25 5 | 25 48 | 26 31 | 27 14 | 27 57 | 28 40 | 29 23 | 30 6 | 30 49 | 31 32 | 32 15 |
| 44 | 22 44 | 23 28 | 24 12 | 24 56 | 25 40 | 26 24 | 27 8 | 27 52 | 28 36 | 29 20 | 30 4 | 30 48 | 31 32 | 32 16 | 33 0 |
| 45 | 23 15 | 24 0 | 24 45 | 25 30 | 26 15 | 27 0 | 27 45 | 28 30 | 29 15 | 30 0 | 30 45 | 31 30 | 32 15 | 33 0 | 33 45 |
| 46 | 23 46 | 24 32 | 25 18 | 26 4 | 26 50 | 27 36 | 28 22 | 29 8 | 29 54 | 30 40 | 31 26 | 32 12 | 32 58 | 33 44 | 34 30 |
| 47 | 24 17 | 25 4 | 25 51 | 26 38 | 27 25 | 28 12 | 28 59 | 29 46 | 30 33 | 31 20 | 32 7 | 32 54 | 33 41 | 34 28 | 35 15 |
| 48 | 24 48 | 25 36 | 26 24 | 27 12 | 28 0 | 28 48 | 29 36 | 30 24 | 31 12 | 32 0 | 32 48 | 33 36 | 34 24 | 35 12 | 36 0 |
| 49 | 25 19 | 26 8 | 26 57 | 27 46 | 28 35 | 29 24 | 30 13 | 31 2 | 31 51 | 32 40 | 33 29 | 34 18 | 35 7 | 35 56 | 36 45 |
| 50 | 25 50 | 26 40 | 27 30 | 28 20 | 29 10 | 30 0 | 30 50 | 31 40 | 32 30 | 33 20 | 34 10 | 35 0 | 35 50 | 36 40 | 37 30 |
| 51 | 26 21 | 27 12 | 28 3 | 28 54 | 29 45 | 30 36 | 31 27 | 32 18 | 33 9 | 34 0 | 34 51 | 35 42 | 36 33 | 37 24 | 38 15 |
| 52 | 26 52 | 27 44 | 28 36 | 29 28 | 30 20 | 31 12 | 32 4 | 32 56 | 33 48 | 34 40 | 35 32 | 36 24 | 37 16 | 38 8 | 39 0 |
| 53 | 27 23 | 28 16 | 29 9 | 30 2 | 30 55 | 31 48 | 32 41 | 33 34 | 34 27 | 35 20 | 36 13 | 37 6 | 37 59 | 38 52 | 39 45 |
| 54 | 27 54 | 28 48 | 29 42 | 30 36 | 31 30 | 32 24 | 33 18 | 34 12 | 35 6 | 36 0 | 36 54 | 37 48 | 38 42 | 39 36 | 40 30 |
| 55 | 28 25 | 29 20 | 30 15 | 31 10 | 32 5 | 33 0 | 33 55 | 34 50 | 35 45 | 36 40 | 37 35 | 38 30 | 39 25 | 40 20 | 41 15 |
| 56 | 28 56 | 29 52 | 30 48 | 31 44 | 32 40 | 33 36 | 34 32 | 35 28 | 36 24 | 37 20 | 38 16 | 39 12 | 40 8 | 41 4 | 42 0 |
| 57 | 29 27 | 30 24 | 31 21 | 32 18 | 33 15 | 34 12 | 35 9 | 36 6 | 37 3 | 38 0 | 38 57 | 39 54 | 40 51 | 41 48 | 42 45 |
| 58 | 29 58 | 30 56 | 31 54 | 32 52 | 33 50 | 34 48 | 35 46 | 36 44 | 37 42 | 38 40 | 39 38 | 40 36 | 41 34 | 42 32 | 43 30 |
| 59 | 30 29 | 31 28 | 32 27 | 33 26 | 34 25 | 35 24 | 36 23 | 37 22 | 38 21 | 39 20 | 40 19 | 41 18 | 42 17 | 43 16 | 44 15 |
| 60 | 31 0 | 32 0 | 33 0 | 34 0 | 35 0 | 36 0 | 37 0 | 38 0 | 39 0 | 40 0 | 41 0 | 42 0 | 43 0 | 44 0 | 45 0 |

| | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 46 | 0 47 | 0 48 | 0 49 | 0 50 | 0 51 | 0 52 | 0 53 | 0 54 | 0 55 | 0 56 | 0 57 | 0 58 | 0 59 | 1 0 |
| 2 | 1 32 | 1 34 | 1 36 | 1 38 | 1 40 | 1 42 | 1 44 | 1 46 | 1 48 | 1 50 | 1 52 | 1 54 | 1 56 | 1 58 | 2 0 |
| 3 | 2 18 | 2 21 | 2 24 | 2 27 | 2 30 | 2 33 | 2 36 | 2 39 | 2 42 | 2 45 | 2 48 | 2 51 | 2 54 | 2 57 | 3 0 |
| 4 | 3 4 | 3 8 | 3 12 | 3 16 | 3 20 | 3 24 | 3 28 | 3 32 | 3 36 | 3 40 | 3 44 | 3 48 | 3 52 | 3 56 | 4 0 |
| 5 | 3 50 | 3 55 | 4 0 | 4 5 | 4 10 | 4 15 | 4 20 | 4 25 | 4 30 | 4 35 | 4 40 | 4 45 | 4 50 | 4 55 | 5 0 |
| 6 | 4 36 | 4 42 | 4 48 | 4 54 | 5 0 | 5 6 | 5 12 | 5 18 | 5 24 | 5 30 | 5 36 | 5 42 | 5 48 | 5 54 | 6 0 |
| 7 | 5 22 | 5 29 | 5 36 | 5 43 | 5 50 | 5 57 | 6 4 | 6 11 | 6 18 | 6 25 | 6 32 | 6 39 | 6 46 | 6 53 | 7 0 |
| 8 | 6 8 | 6 16 | 6 24 | 6 32 | 6 40 | 6 48 | 6 56 | 7 4 | 7 12 | 7 20 | 7 28 | 7 36 | 7 44 | 7 52 | 8 0 |
| 9 | 6 54 | 7 3 | 7 12 | 7 21 | 7 30 | 7 39 | 7 48 | 7 57 | 8 6 | 8 15 | 8 24 | 8 33 | 8 42 | 8 51 | 9 0 |
| 10 | 7 40 | 7 50 | 8 0 | 8 10 | 8 20 | 8 30 | 8 40 | 8 50 | 9 0 | 9 10 | 9 20 | 9 30 | 9 40 | 9 50 | 10 0 |
| 11 | 8 26 | 8 37 | 8 48 | 8 59 | 9 10 | 9 21 | 9 32 | 9 43 | 9 54 | 10 5 | 10 16 | 10 27 | 10 38 | 10 49 | 11 0 |
| 12 | 9 12 | 9 24 | 9 36 | 9 48 | 10 0 | 10 12 | 10 24 | 10 36 | 10 48 | 11 0 | 11 12 | 11 24 | 11 36 | 11 48 | 12 0 |
| 13 | 9 58 | 10 11 | 10 24 | 10 37 | 10 50 | 11 3 | 11 16 | 11 29 | 11 42 | 11 55 | 12 8 | 12 21 | 12 34 | 12 47 | 13 0 |
| 14 | 10 44 | 10 58 | 11 12 | 11 26 | 11 40 | 11 54 | 12 8 | 12 22 | 12 36 | 12 50 | 13 4 | 13 18 | 13 32 | 13 46 | 14 0 |
| 15 | 11 30 | 11 45 | 12 0 | 12 15 | 12 30 | 12 45 | 13 0 | 13 15 | 13 30 | 13 45 | 14 0 | 14 15 | 14 30 | 14 45 | 15 0 |
| 16 | 12 16 | 12 32 | 12 48 | 13 4 | 13 20 | 13 36 | 13 52 | 14 8 | 14 24 | 14 40 | 14 56 | 15 12 | 15 28 | 15 44 | 16 0 |
| 17 | 13 2 | 13 19 | 13 36 | 13 53 | 14 10 | 14 27 | 14 44 | 15 1 | 15 18 | 15 35 | 15 52 | 16 9 | 16 26 | 16 43 | 17 0 |
| 18 | 13 48 | 14 6 | 14 24 | 14 42 | 15 0 | 15 18 | 15 36 | 15 54 | 16 12 | 16 30 | 16 48 | 17 6 | 17 24 | 17 42 | 18 0 |
| 19 | 14 34 | 14 53 | 15 12 | 15 31 | 15 50 | 16 9 | 16 28 | 16 47 | 17 6 | 17 25 | 17 44 | 18 3 | 18 22 | 18 41 | 19 0 |
| 20 | 15 20 | 15 40 | 16 0 | 16 20 | 16 40 | 17 0 | 17 20 | 17 40 | 18 0 | 18 20 | 18 40 | 19 0 | 19 20 | 19 40 | 20 0 |
| 21 | 16 6 | 16 27 | 16 48 | 17 9 | 17 30 | 17 51 | 18 12 | 18 33 | 18 54 | 19 15 | 19 36 | 19 57 | 20 18 | 20 39 | 21 0 |
| 22 | 16 52 | 17 14 | 17 36 | 17 58 | 18 20 | 18 42 | 19 4 | 19 26 | 19 48 | 20 10 | 20 32 | 20 54 | 21 16 | 21 38 | 22 0 |
| 23 | 17 38 | 18 1 | 18 24 | 18 47 | 19 10 | 19 33 | 19 56 | 20 19 | 20 42 | 21 5 | 21 28 | 21 51 | 22 14 | 22 37 | 23 0 |
| 24 | 18 24 | 18 48 | 19 12 | 19 36 | 20 0 | 20 24 | 20 48 | 21 12 | 21 36 | 22 0 | 22 24 | 22 48 | 23 12 | 23 36 | 24 0 |
| 25 | 19 10 | 19 35 | 20 0 | 20 25 | 20 50 | 21 15 | 21 40 | 22 5 | 22 30 | 22 55 | 23 20 | 23 45 | 24 10 | 24 35 | 25 0 |
| 26 | 19 56 | 20 22 | 20 48 | 21 14 | 21 40 | 22 6 | 22 32 | 22 58 | 23 24 | 23 50 | 24 16 | 24 42 | 25 8 | 25 34 | 26 0 |
| 27 | 20 42 | 21 9 | 21 36 | 22 3 | 22 30 | 22 57 | 23 24 | 23 51 | 24 18 | 24 45 | 25 12 | 25 39 | 26 6 | 26 33 | 27 0 |
| 28 | 21 28 | 21 56 | 22 24 | 22 52 | 23 20 | 23 48 | 24 16 | 24 44 | 25 12 | 25 40 | 26 8 | 26 36 | 27 4 | 27 32 | 28 0 |
| 29 | 22 14 | 22 43 | 23 12 | 23 41 | 24 10 | 24 39 | 25 8 | 25 37 | 26 6 | 26 35 | 27 4 | 27 33 | 28 2 | 28 31 | 29 0 |
| 30 | 23 0 | 23 30 | 24 0 | 24 30 | 25 0 | 25 30 | 26 0 | 26 30 | 27 0 | 27 30 | 28 0 | 28 30 | 29 0 | 29 30 | 30 0 |
| 31 | 23 46 | 24 17 | 24 48 | 25 19 | 25 50 | 26 21 | 26 52 | 27 23 | 27 54 | 28 25 | 28 56 | 29 27 | 29 58 | 30 29 | 31 0 |
| 32 | 24 32 | 25 4 | 25 36 | 26 8 | 26 40 | 27 12 | 27 44 | 28 16 | 28 48 | 29 20 | 29 52 | 30 24 | 30 56 | 31 28 | 32 0 |
| 33 | 25 18 | 25 51 | 26 24 | 26 57 | 27 30 | 28 3 | 28 36 | 29 9 | 29 42 | 30 15 | 30 48 | 31 21 | 31 54 | 32 27 | 33 0 |
| 34 | 26 4 | 26 38 | 27 12 | 27 46 | 28 20 | 28 54 | 29 28 | 30 2 | 30 36 | 31 10 | 31 44 | 32 18 | 32 52 | 33 26 | 34 0 |
| 35 | 26 50 | 27 25 | 28 0 | 28 35 | 29 10 | 29 45 | 30 20 | 30 55 | 31 30 | 32 5 | 32 40 | 33 15 | 33 50 | 34 25 | 35 0 |
| 36 | 27 36 | 28 12 | 28 48 | 29 24 | 30 0 | 30 36 | 31 12 | 31 48 | 32 24 | 33 0 | 33 36 | 34 12 | 34 48 | 35 24 | 36 0 |
| 37 | 28 22 | 28 59 | 29 36 | 30 13 | 30 50 | 31 27 | 32 4 | 32 41 | 33 18 | 33 55 | 34 32 | 35 9 | 35 46 | 36 23 | 37 0 |
| 38 | 29 8 | 29 46 | 30 24 | 31 2 | 31 40 | 32 18 | 32 56 | 33 34 | 34 12 | 34 50 | 35 28 | 36 6 | 36 44 | 37 22 | 38 0 |
| 39 | 29 54 | 30 33 | 31 12 | 31 51 | 32 30 | 33 9 | 33 48 | 34 27 | 35 6 | 35 45 | 36 24 | 37 3 | 37 42 | 38 21 | 39 0 |
| 40 | 30 40 | 31 20 | 32 0 | 32 40 | 33 20 | 34 0 | 34 40 | 35 20 | 36 0 | 36 40 | 37 20 | 38 0 | 38 40 | 39 20 | 40 0 |
| 41 | 31 26 | 32 7 | 32 48 | 33 29 | 34 10 | 34 51 | 35 32 | 36 13 | 36 54 | 37 35 | 38 16 | 38 57 | 39 38 | 40 19 | 41 0 |
| 42 | 32 12 | 32 54 | 33 36 | 34 18 | 35 0 | 35 42 | 36 24 | 37 6 | 37 48 | 38 30 | 39 12 | 39 54 | 40 36 | 41 18 | 42 0 |
| 43 | 32 58 | 33 41 | 34 24 | 35 7 | 35 50 | 36 33 | 37 16 | 37 59 | 38 42 | 39 25 | 40 8 | 40 51 | 41 34 | 42 17 | 43 0 |
| 44 | 33 44 | 34 28 | 35 12 | 35 56 | 36 40 | 37 24 | 38 8 | 38 52 | 39 36 | 40 20 | 41 4 | 41 48 | 42 32 | 43 16 | 44 0 |
| 45 | 34 30 | 35 15 | 36 0 | 36 45 | 37 30 | 38 15 | 39 0 | 39 45 | 40 30 | 41 15 | 42 0 | 42 45 | 43 30 | 44 15 | 45 0 |
| 46 | 35 16 | 36 2 | 36 48 | 37 34 | 38 20 | 39 6 | 39 52 | 40 38 | 41 24 | 42 10 | 42 56 | 43 42 | 44 28 | 45 14 | 46 0 |
| 47 | 36 2 | 36 49 | 37 36 | 38 23 | 39 10 | 39 57 | 40 44 | 41 31 | 42 18 | 43 5 | 43 52 | 44 39 | 45 26 | 46 13 | 47 0 |
| 48 | 36 48 | 37 36 | 38 24 | 39 12 | 40 0 | 40 48 | 41 36 | 42 24 | 43 12 | 44 0 | 44 48 | 45 36 | 46 24 | 47 12 | 48 0 |
| 49 | 37 34 | 38 23 | 39 12 | 40 1 | 40 50 | 41 39 | 42 28 | 43 17 | 44 6 | 44 55 | 45 44 | 46 33 | 47 22 | 48 11 | 49 0 |
| 50 | 38 20 | 39 10 | 40 0 | 40 50 | 41 40 | 42 30 | 43 20 | 44 10 | 45 0 | 45 50 | 46 40 | 47 30 | 48 20 | 49 10 | 50 0 |
| 51 | 39 6 | 39 57 | 40 48 | 41 39 | 42 30 | 43 21 | 44 12 | 45 3 | 45 54 | 46 45 | 47 36 | 48 27 | 49 18 | 50 9 | 51 0 |
| 52 | 39 52 | 40 44 | 41 36 | 42 28 | 43 20 | 44 12 | 45 4 | 45 56 | 46 48 | 47 40 | 48 32 | 49 24 | 50 16 | 51 8 | 52 0 |
| 53 | 40 38 | 41 31 | 42 24 | 43 17 | 44 10 | 45 3 | 45 56 | 46 49 | 47 42 | 48 35 | 49 28 | 50 21 | 51 14 | 52 7 | 53 0 |
| 54 | 41 24 | 42 18 | 43 12 | 44 6 | 45 0 | 45 54 | 46 48 | 47 42 | 48 36 | 49 30 | 50 24 | 51 18 | 52 12 | 53 6 | 54 0 |
| 55 | 42 10 | 43 5 | 44 0 | 44 55 | 45 50 | 46 45 | 47 40 | 48 35 | 49 30 | 50 25 | 51 20 | 52 15 | 53 10 | 54 5 | 55 0 |
| 56 | 42 56 | 43 52 | 44 48 | 45 44 | 46 40 | 47 36 | 48 32 | 49 28 | 50 24 | 51 20 | 52 16 | 53 12 | 54 8 | 55 4 | 56 0 |
| 57 | 43 42 | 44 39 | 45 36 | 46 33 | 47 30 | 48 27 | 49 24 | 50 21 | 51 18 | 52 15 | 53 12 | 54 9 | 55 6 | 56 3 | 57 0 |
| 58 | 44 28 | 45 26 | 46 24 | 47 22 | 48 20 | 49 18 | 50 16 | 51 14 | 52 12 | 53 10 | 54 8 | 55 6 | 56 4 | 57 2 | 58 0 |
| 59 | 45 14 | 46 13 | 47 12 | 48 11 | 49 10 | 50 9 | 51 8 | 52 7 | 53 6 | 54 5 | 55 4 | 56 3 | 57 2 | 58 1 | 59 0 |
| 60 | 46 0 | 47 0 | 48 0 | 49 0 | 50 0 | 51 0 | 52 0 | 53 0 | 54 0 | 55 0 | 56 0 | 57 0 | 58 0 | 59 0 | 60 0 |

Astrorum sapientes intuentes coeli tractantes magnitudinem
nobilissima eius nec unquam sine admiratione quam maxima
capti pulchritudine inenarrabili quam super virtute creaturarum omnium prima comprehensione et motu
virtute quam a primo per minores distributa [illegible] sibi commissam ut illius sentiat omnia quae elementaria natura
[illegible] et mensura [illegible] quoque tamquam quemdam magnum divisorum inventorem vice debitam quae
in figuris orbibus scilicet circulis suis per ipsos sive per magnos orientes primum volverent. Et in
[illegible] finalem [illegible] haud quaque vice [illegible] uno continuissimo et toto debitum. Ipsa
[illegible] sit continuitas [illegible] notissima [illegible] se se revolvens: quemadmodum quoquam alio
magnitudinem discreta quantitate notificandam per facta [illegible] per partes divisionem. Ita ut ex ea
ostensa [illegible] magnitudine [illegible] caelesti [illegible] circumferentia eadem in eorum quarta
primum divisa. Tamquam qualibet quarta in 30 passus, passus quoque quolibet in 60 pedes, et pede
in 60 digitos, et digito in totidem grana. Et demum [illegible] assumpta mensura si
ultra grana [illegible] hac [illegible] divisione facta [illegible] mole super eo [illegible] motum omnium
per partes [illegible] in qua [illegible] illas [illegible] passu pede et cetera et aliquo
pluribus [illegible] tali [illegible] divisione motuum [illegible] in aequali tempore perambulare
potest [illegible] velocius illo quod pertransiet pauciores. Velocissimo tamquam tardiori et tardio
ri aequaliter distantibus: dum tamquam [illegible] perambulatio. Ex eadem [illegible]
[illegible] illorum initium [illegible] comprehendere [illegible] motuum [illegible] ad invicem distantia
sita antecessio subsequuntur. [illegible] Videntur quippe [illegible] primo caelorum orbe [illegible]
[illegible] qui et primum mobile dicitur. Cuius zodiacus [illegible] primum mobile in duo cyclo
[illegible] oblique dividente [illegible] quo motum idest planete moventur sine statu
[illegible] Notitiam [illegible] et eius zodiacum praefati sapientes in eius partibus [illegible]
notitiae [illegible] discreta in partes quasi maiores et naturae debitas [illegible]
elementorum in sui [illegible] quae altitudinem [illegible] suscepit [illegible] et [illegible]
tantam [illegible] superioribus [illegible] habeat et [illegible] inquit Albuzali. Illud
primum diviserunt in [illegible] quatuor elementorum singulis seu [illegible]
respondentes: quas vocaverunt signa: quodlibet signum habeat super elementum. Et ea quae
sunt [illegible] materiae obligata. [illegible] magna diligentia [illegible] antiquitas.
Et cum parte duodecime signa sint [illegible] partes eas in [illegible] subdivisionem [illegible]
in 30: sic ut omnes [illegible] constituerent 360 partes, quas dixerunt gradus [illegible]
gradientium planetarum successive ascensu ut descensu [illegible]
[illegible] partes in angulo [illegible] esse 360 quia [illegible] et [illegible]
[illegible] inquit Albuzali [illegible] tractatu [illegible] diviserunt [illegible]
quemlibet in 60 particulas quas minuta appellant: eo quod minute et exigue existant
partes. Minuta [illegible] quodlibet in 60 [illegible] gradus
minores [illegible] partes [illegible] subtiliores [illegible]
divisionem [illegible] 60 [illegible] divisibilitatis et [illegible]
[illegible] pene [illegible] indivisibilia [illegible]
[illegible] planete [illegible] possit [illegible] quo fit [illegible]
nominaverunt [illegible] particulas [illegible] gradus fractos seu minutos [illegible] naturam
[illegible] ab unitate incipiendo quae prima fractionum [illegible] accommodate. Dua
litas [illegible] fractionum [illegible] Ternalis [illegible] fractionum [illegible] Quaternalis aut [illegible]
in infinitum [illegible] quantitas [illegible] dividi. Et hac itaque divisione [illegible] minimas
in infinitum partes [illegible] augetur discrete: quas [illegible] diminuit integrorum
puta signorum atque graduum [illegible] eadem et [illegible] Eorum hac eadem divisione [illegible]
[illegible] duplici quantitate [illegible] et discreta [illegible] continua [illegible]
signum gradus minuta et cetera et discreta [illegible] duo tria 36 et cetera. Et hec est causa
quod in [illegible] physica duo [illegible] necessario sunt. Alter qui exprimit quantitatem
continuam et [illegible] quod sit [illegible] partes [illegible] in suo toto
[illegible] sola loca [illegible] habentes in [illegible] loco aut
gradu aut per gradum. Nam [illegible] graduum signorum [illegible] per minuta ut [illegible]
Alter numerus est maius et est [illegible] habens tot in se unitates quot partes [illegible]
volumus [illegible] in physica [illegible] praedictis [illegible] physica [illegible]
qua utuntur physici idest sapientes astrorum totam artem [illegible] motuum complectentur

Non dicit et ipm tempus computandum cum hoc solo non ignorato quod in tempore hore sunt integri que admodum gradus in motu [illegible] aut [illegible] illas erunt dies [illegible] quos accipi oportet continent menses [illegible] vero sine [illegible] simpliciter annos [illegible] 30 menses et dies sunt illa que [illegible] situ tenent post horas vero minutie sunt ut in motu similiter appellande vel [illegible] 2 3 [illegible] [illegible] tam motus quam temporis. quantum modo sufficiat positio tenteamus

## De addicione

Secundum quod maiores maiorum quoscumque hoc [illegible] signa [illegible] simul adde valeas arte te [illegible] videlicet ut quemlibet [illegible] per loca distincte maiorum signorum graduum [illegible] fiet ubi addicio: tandem et illos quos adde debeas [illegible] in loco sub [illegible] ordine Incipe itaque operari a dextris ut ars de integris [illegible] adde quod [illegible] Et si ex tali addicione surgunt 60 vel plus dele 60 residuum in loco suo dimittendo et pro 60 pone unitatem ad locum denominacionis grossioris hoc ideo quia cum sit addicio colligendo partes subtiliorum in quas pars grossioris denominacionis fuerat divisa [illegible] quia grossior sunt 60 [illegible] in subtiliores fractiones oportet [illegible] addicione collecta fuerit 60 [illegible] ex eis componatur unum grossiorum denominacionis [illegible] in quibus [illegible] dividi [illegible] ex eis componatur [illegible] est Et hoc tenendum est quousque devenitur ad gradus et quorum [illegible] addicione si collecta fuerit 30 aut plures accipiatur unum pro 30 aliis in loco suo relictis si fuerit ponatur in loco signorum ex [illegible] ratione [illegible] signis [illegible] Si excreverit [illegible] vel plura abiciantur [illegible] in suo loco teneantur In addicione cum [illegible] grene non sunt [illegible] itemque sex incompleta [illegible] quociescumque colligunt abici debent Et in addicione temporis eisdem preceptis utemur quo ad fractorum ad horas autem quia [illegible] fuerit 24 [illegible] dies [illegible] in collegimus 24 vel plures subtractis 24 et pro eis pro unitate ad dies [illegible] per horas dies [illegible] sunt custodiende [illegible] addicione

## Si aut subtrahe

[illegible] ubi [illegible] maiores signorum [illegible] distincte [illegible] fiet et subtractio et cos sub eis quos subtrahe ponis in locis suis [illegible] ordine a subtiliori similiter incipiendo Subtrahe itaque minora integris hoc [illegible] Si non valeas subtrahere quia [illegible] superior minor est accomoda unitatem de uno grossioris denominacionis et illa in loco [illegible] in quo subtrahis [illegible] resolue in 60 tandem subtrahe dimisso residuo quod [illegible] in loco suo Si aut accomodaris de loco [illegible] uno mediato [illegible] de loco signorum deportando illa unitatem [illegible] in loco graduum 29 et in loco [illegible] fractorum [illegible] ad locum in quo operaris Ubi aut [illegible] 60 tandem subtrahe sine [illegible] accomodacione [illegible] te oportet modo [illegible] qui [illegible] integra in suas partes atque fractiones puta dividendo signum in 30 gradus gradum in 60 minuta minutum in 60 [illegible] sufficiat In loco etiam signorum [illegible] sit maior [illegible] subtrahi non posset [illegible] integra ponenda in loco signorum et subtrahe quodque superfuerit maneat in loco suo hoc [illegible] de [illegible] toto subtrahitur ubi [illegible] excipi non poterat In subtraccione autem temporis quo ad fractiones [illegible] quemadmodum de motu [illegible] horis vero si nequiverimus subtrahe [illegible] resoluemus in 24 [illegible] posset subtractio

## De duplacione

Non est minus curandum quomodo vel [illegible] aliud [illegible] addicio [illegible] ad [illegible] Nec dicit ab ea [illegible] est in integris [illegible] excreverit [illegible] duplacione [illegible] sicut [illegible] addicionem [illegible] tam in motu quam in tempore

## Mediato

[illegible] in hac arte [illegible] de integris tradita [illegible] hoc [illegible] quociescumque digitus qui [illegible] in primo loco [illegible] denominacionis [illegible] mediari non posset quia [illegible] sub eo pars et [illegible] pro unitate [illegible] 30 in subtiliori denominacione [illegible] addicio Si fiat mediatio [illegible] de signis medianda [illegible] in loco graduum ponantur [illegible] Et in [illegible] tempore ubi dies mediari debent [illegible] in loco horarum [illegible] mediacio

## Modum qualem multiplicacionis

[illegible] placuit [illegible] breuibus et [illegible] et quibuscumque denominacionibus [illegible] autem [illegible] in quantitate continua [illegible] quedam [illegible] inmane sunt [illegible] et [illegible] maiores [illegible] et duo [illegible] ponit [illegible] unitate Et quia in multiplicatione [illegible] denominans [illegible] distincta maiores [illegible] tociens quot in se multiplicans habuit necesse [illegible] multiplicandum in [illegible] distincta [illegible] sunt [illegible] unitates ut [illegible] in ternario [illegible] unitas [illegible] multiplicacione [illegible] ubi tam multiplicandus quam multiplicans duplicem [illegible] et [illegible] duplicem [illegible] ex parte [illegible] multiplicacionem alteram [illegible] que [illegible] ratione maiores alteram vero que habebitur [illegible] multiplicante maior [illegible] multiplicandi [illegible] quot [illegible] cos [illegible] maiores [illegible] multiplicante

De addicione capitulum

Capitulum de subtractione

Capitulum duplacionis

Capitulum mediacionis

De multiplicacione capitulum

[illegible] denominans [illegible]

plicans in se habuit unitates per denominatorem vero subtiliores fractiones unde locum in quotto sit loco a denominatore grossiore ipsum productum poni debeat, denominatores enim per loca differunt (ut ante dictum est)

**Multiplicare** vero minucias quaslibet per alias nihil aliud est quam constituere ex unoquoque precedencium quorum prima in se est integrum sive integra puta gradus. Secunda multiplicans. Tercia multiplicanda. Quarta vero productum. In quacumque enim proporcione libet se integrum ad multiplicantem in eadem multiplicandum ad aliud quod extrosit, ut unus gradus ad 6 minuta multiplicantis in decupla, ergo vero 11 multiplicandi ad 3 minuta quod est productum in eadem decupla. Cognitum per talem ergo multiplicacionem minucias productum esse in subtiliori denominacione pervenit unde tamen est productus ne mireris. Cognitum per hanc eciam multiplicacionem sequitur quod ... denominatoribus esse augebuntur et denominatores tanto et parcium quanti seu integri subtiliorum. Quanto enim maior denominator minuciarum fuerit tanto minor pars integri. Habitum iam ad regulas licet procedi.

**Prima regula** Si multiplicas gradus per gradus gradus provenient, eo quia gradus sunt integra, regula autem arismetrice est quod quotiens integra multiplicantur per integra, tunc ipsa non sunt data in quantitatem continuam actu, ex parte eorum augebuntur simul quantitates, quia et distracta et si augetur quantitas quia non exibit subtilior denominatio, illa enim que diminuit non augent. Gradus ergo multiplicati per gradus faciant esse gradus et signa si ultra in confluctum graduum excreverit productum.

**2a regula** Si multiplicas minucias quascumque per gradus eedem ipsa minucia provenient, ut si minuta per gradus provenient minuta, secunda per gradus similiter sunt 2a et cetera, eo quia in tali casu ipsa dictarum minucia redacta est quantitatem continuam, ergo est solum et unus erit subtiliata seu diminuta quantitas quia in eadem denominacione non in diversis, gradus namque denotat quotiens ipsa minucia sumi debeat.

**Tercia regula** Si multiplicas minucias per alteram minuciam provenient minucia denominata a numero qui denominatorem multiplicantis et multiplicandi est additi constituit, aut provenient minucia tantum distans a multiplicanda quantum multiplicans distat ab integro, tercia minuta per 11 multiplicata 2a provenient. Si eo denominatorum, post invicem addiderimus erunt 3 et cetera constituit denominator producti. Secunda enim minucia per unum distat a prima, hec est a minuta quemadmodum minuta per unum distat a gradibus. Et talem in quibuscumque minuciis esse opponendo in metro denominatorem multiplicantis et multiplicandi producti namque denominatorem producti. Numeratorem vero invenietis in tabula que intitulatur de parte precedenti. Sed vero potius etiam pro denominatoribus habendis subscripta vide tabula, in angulo cuius ipsius cum aspectu multiplicandi et multiplicantis producti denominatorem invenies.

| Multiplicantis | S | G | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S | aut S | S | G | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| G | S | G | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | G | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 3 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 4 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 5 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 6 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 7 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 8 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |

Multiplicandi

**Quarta regula** Si multiplicas minucias quascumque per signa aut converso productum provenient in denominacione immediate grossiori cum eadem minucia, ut si multiplicas minuta per signa vel converso gradus provenient, qui sunt immediate grossiores denominacione cum minuta. Quia si 2 per 3 ... excreverit et de aliis, eo quemadmodum enim quecumque multiplicata per integra hoc est per gradus ipsa minucia provenient, que est post integra gradus hic precedentes dicta minucia quecumque.

multiplicantis per signa que sunt a gradibus necesse est productum eadem minuciam denominacione in denominacione.

**Quinta regula** Si multiplicas gradus per signa sive converso signa exibunt per racionem precedentem.

**Sexta regula** Si multiplicas signa per signa provenient ante signa, id est productum ponendum est ante ipsa signa. Intelligite hec regule procedunt retinendo tamen in signis ... processum sexagenarium parcium. Ex hiis regulis ... in motibus planetarum non occurrunt, si reperta... mandabis sicut etiam cordarum tabularum ... multiplicacionum reperta in motu.

**Pro multiplicacione tandem in tempore** procedendum est per omnibus hiis regulis non aliter quam in motibus. Vero si multiplicas horas per horas hore consurgunt. Si minucias quascumque per horas aut converso horas per minucias ipsa minucia provenient. Et tandem minucia temporum per minucia multiplicata alteram gignunt minuciam. Hec vero ad motum predicte namque regule quo ad opus nostrum sufficiunt.

Capitulum de divisione

# Cum divisio magnam habeat cum multiplicatione affinitatem

Cumque enim in multiplicatione fuit productum in divisione numerus dividendus dici [illegible] multiplicandi etiam divisoris multiplicando vero quotiens locum tenet, ideo quemadmodum multiplicando per [illegible] tabulam que vulgari [illegible] tabula de parte proportionali sita [illegible] potuit [illegible] Per aliud [illegible] divisio [illegible] plex divisoris de dividendo abstractio primo itaque et primo [illegible] imprimis quotiens quo [illegible] in qua ipse fuit denominatio regula infra adnotate edocebunt equidem sufficiet [illegible] isto [illegible] imprimis querere primum numerum divisoris qui est in grossiori denominatione in fronte tabule et in [illegible] talem [illegible] descendendo vide numerum similem aut minorem [illegible] primo numero dividendo. Et ubi eum inveneris numerus qui in latere sinistro tabule adiecto [illegible] statuitur erit numerus quotiens: [illegible] ergo suscipe et scribe supra caput dividendi in loco sibi debito [illegible] regulas divisionis. Duc ergo per multiplicationem eum quotientem: in omnes [illegible] divisoris producta [illegible] primo subscribendo que dividit in loco qui debentur ex multiplicatione tamen subtrahe; postquam subtractionis si aliquid superest de numero dividendo [illegible] ut prius quotientem et ipse etiam in subtiliori denominatione. Et operare per omnia ut prius donec nihil sit primo dividendo aut quod [illegible] dividere non est nobis necessarium. Ubi aliud non posset imprimis aliquem numerum denominationis [illegible] subtilioris [illegible] quotiente ponenda [illegible] in illo loco et querendus numerus denominationis [illegible] ut negotiandum [illegible] modo. Ut autem constet [illegible] denominatio sit et in quo loco [illegible] debeat numerus quotiens [illegible] et primo in divisione reperitur. Ideo de sunt subscripte regule.

**Prima regula.** Si gradus dividantur per gradus et [illegible] dividendi sint plures dividentibus in quotiente veniunt [illegible] quare tunc numerus quotiens ponendus est supra gradus [illegible] dividendi.

**2a regula.** [illegible] minuta divisoris per [illegible] numeros quotiens est in eadem denominatione [illegible] minuta que dividit quare supra caput [illegible] debet.

**3a regula.** Si minutias per alias dividis et dividentis [illegible] debet [illegible] subtilior [illegible] dividentium aliquas non [illegible] fieri divisio. Denominator quotientis [illegible] fuerint que denominantur [illegible] per subtractionem denominationis dividentis a denominatore dividendi: [illegible] minuta quotientis [illegible] distantia [illegible] dividenda a dividente.

**Quarta.** Si signa dividantur per [illegible] in quotiente sunt gradus.

**Quinta.** Sicut autem [illegible] signa dividuntur per signa in quotiente veniunt gradus qui sunt subtiliores denominatione [illegible] dividendi sic [illegible] quotiescumque per signa fuerit divisio gradum aut quarumlibet fractionum in quotiente [illegible] denominationis [illegible] subtilioris [illegible] denominatione dividende ut si [illegible] per [illegible] sunt in quotiente [illegible] signa [illegible] veniunt [illegible]

**Sexta regula.** [illegible] signa habent in quotiente [illegible] aut has regulas [illegible] de signis et [illegible] sexagenarium [illegible] precedentibus ut in multiplicatione [illegible] quia [illegible] doctrinalis [illegible] in [illegible] maioribus puta [illegible] in [illegible] ad [illegible] nobis est [illegible] tamen in motu [illegible] in tempore [illegible] tabulas [illegible] tabulas [illegible] de [illegible] divisionum [illegible] itaque regulas de gradibus divisionum [illegible] que vero sunt de [illegible] divisione per alias [illegible] simpliciter [illegible] tempore sunt [illegible] potest [illegible] has regulas denominatores quotientis de subscripta tabella [illegible] in angulo [illegible] dividendi et divisoris [illegible]

| Dividendus<br>Divisor | an sig | S | G | M | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S | S | G | M | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| G |  | S | G | M | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| M |  |  | S | G | M | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 |  |  |  | S | G | M | 2 | 3 | 4 | 5 | 6 |
| 3 |  |  |  |  | S | G | M | 2 | 3 | 4 | 5 |
| 4 |  |  |  |  |  | S | G | M | 2 | 3 | 4 |
| 5 |  |  |  |  |  |  | S | G | M | 2 | 3 |
| 6 |  |  |  |  |  |  |  | S | G | M | 2 |
| 7 |  |  |  |  |  |  |  |  | S | G | M |
| 8 |  |  |  |  |  |  |  |  |  | S | G |
| 9 |  |  |  |  |  |  |  |  |  |  | S |

## Dividendo

Determinato modo operandi generaliter circa astrorum scientiam [illegible]: nunc ad negocium motuum descendere libet. Et primum ad motus equales seu medios quibus mediantibus veri inveniendi erunt. Licet enim motus uniformis planete in semetipso sit naturalis et equalis [illegible] augeatur aliquando plus aliquando minus motus planete [illegible] in suo circulo [illegible] epiciclo et epicicli in [illegible] circulo [illegible] computatus est multiplex [illegible] non uniformis. Alguit albuzar [illegible] posse [illegible] equales [illegible] in [illegible] diversitate motus ordinaverunt motus equales quibus [illegible] nature [illegible] primum [illegible] autem motus [illegible] per modos [illegible] in [illegible] fuerant [illegible] sunt accipienda ut completa

## Radicem anni Christi vniuscuiusque motus medii primi constitue

Radix anni Christi nihil aliud est quam arcus alicuius orbis secundum equalem motum per tempus aut tempus transitum intercepta inter principium a quo computatur talis motus et inter lineam eiusdem motus terminatam ad principium anni currentis inventam. **Principium autem anni** currentis secundum periciores motus per annos romanorum fit super in meridie ultime diei decembris in illa scilicet hora vigesima quarta in qua exit et finis anni completi aut tamquam completi. Pone itaque tibi annum Christi completum pro quo velis, qui in eius fine et principium anni [illegible] sequentis et cum eo anno completo intra tabulam annorum collectorum quem quere in columna annorum et ubi tibi positum. Et si eum invenies motus per eum in tabula positus erit radix anni sine aliqua ulteriori operatione in ista tabula quam augium et stellarum fixarum si illius motus radicem desideras. In tabula vero solis sic de sole operaberis et de singulis. Si autem annum propositum non invenies in tabulis et in motu predicto et casu de motu in [illegible] ibi invenies vel scribe per singula loca. Deinde hunc annum per propinquiorem subtrahe ab anno per te posito et quod superfuerit sunt anni qui dicuntur expansi. Intra itaque tabulam annorum expansorum et ubi eosdem invenies illius in tabula similiter titulum et in annis collectis accepisti, scilicet summe motum scribe in sub posito et adde secundum artem traditam a subtiliori vigesima incipiendo. Illius autem facta additione proveniet tibi radix anni currentis.

**In exemplo** volo radicem augium et stellarum fixarum invenire ad annum Christi currentem 1482. Primo accipio annum completum qui est 1481, quoniam in eius fine currens fuit 1482. Primo itaque hunc annum completum in columna annorum collectorum et ibi non inveni. Tunc itaque sine [illegible] ponam et considero sibi minorem propinquiorem 1468 suscipiam [illegible] motum positum [illegible] et in meo posito superfuerunt 6 10 et 16. Deinde facta subtractione huius minoris anni et in tabula annorum expansorum pones [illegible] annos in tabula similiter augium et stellarum fixarum accipio motum qui est 0 0 17 23 29 principium anni currentis 1482. Eodem operando invenies de radice cuiuslibet motus plurium tabularum 0 10 12 70 77.

## Radicem motus meridianam Cracouiensem

ad meridianum Cracouiensem [illegible] alii meridiano adaptare. Non est dubium quod civitates ab invicem notabili distantia situate quedam sunt propinquiores orienti, quedam vero occidentali plage, et causa ob rotunditatem terre habere diversa [illegible] meridiei et occasus necesse est, ita ut que fuit orientalior prius habeat ortum meridiem et occasum que vero occidentalior posterius. Singula [illegible] eiusdem orientalioris propter quod tabule [illegible] meridiano ordinato non nisi facta reductione alii inservire possunt. Quam quidem reductionem in radice hic sufficit. Accipe igitur longitudinem Cracouiensem quam [illegible] causa longitudinis civitatum maiorum et illius scilicet civitatis per quam reducere cupis [illegible] Cracouie et apud alios philosophos originalem [illegible] in cosmographia Ptholomei [illegible] qui arte doctrinali [illegible] conduxit. Deinde operare [illegible] alicuius distanciam [illegible] in gradibus et minutis [illegible] ad [illegible] cuius sunt maiores; cuius vero minor longitudo [illegible] minorem de maiori et manebit differentia maioris et occidentalioris minor. Substrahe [illegible] ille distant ab invicem: differentia quidem est in gradibus et minutis longitudinum secundum quam civitates ille distant [illegible] una hora et minuta [illegible] gradu 1 minuta hore. Pro quibuslibet 15 minutis [illegible] et habebis [illegible] et collige motum sibi respondentem. Tunc tabula mediorum motuum in horis et minutis. Si alicuius civitatis maior est longitudo aut motum subtrahe a radice Cracouiensi [illegible] adaptata meridiano illius civitatis. Et [illegible] adde. Si minor [illegible] in [illegible] et magis in velocioribus in tardioribus aut reductio in planetis [illegible].

**In exemplo** volo reducere radicem Cracouiensem medii motus solis planete 18 11 31 28 ad meridianum Pragensem et invenio anni 1481 completi que est 49 [illegible] Pragensem vero 29 30. Facta tamen subtractione longitudine Cracouiana 32 36 [illegible] quam [illegible] in tempus accipiendo [illegible] maior manebit [illegible] pro quolibet minuto [illegible] gradu 1 minuta et erunt 12 minuta hore [illegible] in tabula [illegible] in horis et minutis tempus 28. Cum hoc [illegible] in tabula [illegible] collige motum 30 [illegible] adde radici Cracouiensi pro eo quod longitudo Pragensis [illegible] et prodibit radix [illegible] Pragensi meridiano in sole [illegible] minor [illegible] Cracouiensi 18 46 2 1. Eodem [illegible] et aliis planetis [illegible].

## Radicem augis cuiuslibet planete reperire

Intra cum annis Christi completis tabulas augium pro quolibet planeta [illegible] primo tabulis annorum collectorum et ibi forsitan invenies annum Christi [illegible] positum pones scriptum de tabula planete illius pro quo operaris [illegible] et habebis quod queris. Si vero non invenies annos [illegible] intra [illegible]

in tempore pro [illegible] subtrahe [illegible] adde

motum propinquiorem et accipe motum eius cum annis expansis intra tabulam annorum expansorum tabulam dico annorum expansorum illam cum suppositione annorum collectorum: apud quos motum suscepisti. Motum itaque per annos expansos inventum adde supra et provenit radix augis illius planete de quo negociaris. Scire autem notandum quod tabula augium in annis collectis sunt taliter quod cuilibet planete servit una excepta [illegible] parte sole et venere quibus simul una [illegible] omnes volutiones augis loco. In expansis vero [illegible] una servit pro omnibus planetis a 20 annis illa [illegible] super qua in [illegible] annis collectis [illegible] quibus fit separatio seu introitus. **In exemplo** volo invenire radicem solis et veneris que nihil aliud est quam augis ad [illegible] anno christi 1481 completo. Accipio primum annum completum [illegible] inter annos collectos in tabula augium. Et cum non invenio sine accipio [illegible] minorem propinquiorem 1468 et motum quem inde reperio in tabula solis et veneris ex [illegible] scribo [illegible] deinde subtraho hunc annum minorem a meo proposito manent [illegible] anni [illegible] que inde intro tabulam annorum expansorum eam tabulam cui supposita est ille annus [illegible] 1468 prius quem accepi motum. Et in ipso capite annorum [illegible] accipio motum qui est 1 21 [illegible] pro anno christi completo 1481 videlicet 3 1 0 37 17. Simili modo operandum est in aliis planetis per vinginti quatuor tabulas. Has autem augium radices ad alium meridianum inducere nichil oportet [illegible] motus [illegible] qui fere nullus est in tempore quantumcunque distent meridiani ad invicem.

**Sequitur motum cuiuslibet planete per ipsius tabulas ad tempus propositum quodcunque invenire**

Primum pone tibi tempus pro quo habere voles motum planete et vide si illud tempus includit in se aliquos menses totaliter elapsos. Item si habuerit dies aliquos ultra menses completos. Si etiam hore minuta secunda et [illegible] sunt [illegible] dies [illegible] pro quibus motum planete habere cupis. Signa igitur tibi totum tempus hoc ad partem. Quo signato scribe radicem anni illius planete de quo intendis inventam per primam propositionem. Inde quere signasti menses et in tabula mensium anno [illegible] descendente si annus fuerit quibus fuerit scribe motum planete inventum in [illegible] tabula [illegible] mensium [illegible] quem scribe sub radice. Si tunc annus fuerit bisextilis uteris [illegible] pro tabula anni bisextilis [illegible] deinde si habes ultra illum mensem aliquot dies [illegible] modo eosdem dies intra tabulam in diebus eiusdem planete de quo prius et motum [illegible] in diebus positum tolle scribe [illegible] sub prius [illegible] deinde et [illegible] modo horas quas [illegible] ultra dies in tabula horarum [illegible] motum [illegible] locatum [illegible] sub gradibus [illegible] motum [illegible] [illegible] minutis si [illegible] in tempore. Hoc debes quod cum quantitatem temporis intraveris [illegible] tabule de qua accipis motum sunt [illegible] in eadem erat [illegible] ut si intras [illegible] et aliqui [illegible] sequentes [illegible] si [illegible] erunt. **Adverte** igitur quod qualibet [illegible] in suo loco debite scribas. Cum modo itaque minuta in eandem tabulam horarum intra [illegible] tabula horas et [illegible] horas et [illegible] motum scribe sub [illegible] et si [illegible] quod habeas [illegible] plus quam 30 minuta [illegible] 30 tolle quod motum [illegible] scribe sub [illegible] in loco suo. Deinde intra ad [illegible] quae sunt ultra 30 et [illegible] motum [illegible] facias [illegible] si habes plus in tempore quam 30. Postquam autem cum toto tempore intrasti ac recepisti motum [illegible] adde omnia [illegible] et habebis [illegible] planete ad illud tempus propositum. [illegible] in tempore [illegible] aliquis completus solum dies [illegible] tabula [illegible] diebus solum in tabula [illegible] intrandum. Item si non habueris horas aliquas ultra dies [illegible] tabulam horarum ingredi non est necesse. **In exemplo** volo invenire medium motum solis hora decima post meridiem anno domini currente 1482 ad 20 diem aprilis completa hora decima post meridiem [illegible] 26 [illegible] 30 et [illegible] 18. In hoc autem tempore considera quod tempus completum est Marcius [illegible] intro itaque tabulam mensium anno [illegible] [illegible] quia 29 post bisextilem [illegible] descendendo et ex parte Marcii in tabula solis accipio motum [illegible] 9 18 [illegible] 31 28 quia [illegible] motum pro 20 die aprilis intro tabulam dierum et ex opposito 20 [illegible] in tabula medii motus solis [illegible] motum [illegible] 0 19 [illegible] 26 32 quem etiam scribam sub prius scripto per loca sua. Et supposuera etiam ultra dies horas 10 [illegible] in tabula horarum [illegible] in tabula medii motus solis [illegible] motum [illegible] 0 [illegible] 58 28 accipiendo [illegible] etiam scribam sub prioribus post hoc descendo ad [illegible] 26 que quia [illegible] sunt plus quam 30 et [illegible] in tabula [illegible] non invenio: accipio motum primo positum [illegible] 30 [illegible] et [illegible] cum scribam sub prioribus per loca sua [illegible] quia intro cum [illegible] [illegible] in [illegible] ultra 30 minuta horarum sunt adhuc 16 quorum motum positum ex opposito 16 similiter accipiam [illegible] 0 39 24 [illegible] Idem [illegible] 30 in tabula [illegible] [illegible] ultro primum [illegible] 30 [illegible] et motum qui est [illegible] 27 tollam ponamque sub motibus prioribus. Hec similiter sunt [illegible] deinde [illegible] quia [illegible] ultra

20 sunt adhuc 20 [illegible] ex opposito 20 amplia motu s. 0 25 16 26 cum ponendo
solis ad [illegible] ultima cum 18 [illegible] minuta et invenio 0 22 21 17 hunc cum suppono
[illegible] motibus et quia motum solis non [illegible] me exposcere [illegible] et sequentibus [illegible]
[illegible] [illegible] et [illegible] aliarum horum omnium motuum [illegible] [illegible] cum per [illegible] Consuetudo
ne veniunt aut duo [illegible] ex quo sunt multa adeo quod possunt ex [illegible] [illegible] de [illegible] et [illegible]
[illegible] practicantibus [illegible] subtilis motus [illegible] in denominatione grassiori colligo itaque me
[illegible] essent [illegible] 20 [illegible] tercetis [illegible] in denominatione [illegible] quod [illegible] queruit [illegible]
[illegible] motu solis 1 [illegible] 21 18 ad tempus positum [illegible] planete per [illegible] tabulas intrando [illegible]
medium motum aut medium argumentum cuiuscumque planete [illegible] habere desideras

## Augem cuiuslibet planete secundum pro die intra anni [illegible] praestantam

[illegible] radice augis planete de qua [illegible] deinde [illegible] mensis sit ille [illegible]
[illegible] Januarii quotuslibet. Cum [illegible] intra tabulam augium in diebus motus [illegible]
illud [illegible] adde radici et habebis quod queris. Si autem dies positus sit alterius mensis
[illegible] a Januario intra primum cum mense immediate completo [illegible] dies in tabulam augium
et suscipe [illegible] motum scribens sub radice. Deinde [illegible] et [illegible] optatum
in diebus et motum illum [illegible] sub [illegible] [illegible] et dies positos [illegible] post
In hac [illegible] operacione si te contingat habere annum bisextilem et dies [illegible] et habere: potes
[illegible] Februarium [illegible] intrare cum die sequenti a die posito in tabula dierum [illegible] sensibilis et a fortiori
[illegible] hac cautela non [illegible]: nec [illegible] error [illegible] sit adeo [illegible]
motum augium ad horas adiutorio non oportet cum ille sit [illegible]

## Exempli gratia

[illegible] pono augem
[illegible] quaerendo motum [illegible] doctrinam
[illegible] [illegible] Aprilis [illegible] radicem augis solis [illegible] completa sit
solis [illegible] 20 die Aprilis [illegible] vigesima Aprilis mensis immediate [illegible] 21
[illegible] 1 0 37 17 et [illegible] motum [illegible] tollam qui est 0 [illegible]
Martius [illegible] in tabulam [illegible] motum [illegible] in tabulam in diebus intrando [illegible]
et [illegible] sub radice [illegible] cum imo dies 20 in tabulam [illegible] [illegible] 1 0 21 [illegible]
1 [illegible] [illegible] addendo [illegible] augem solis ad vigesimum Aprilis [illegible] planete habenda.

## Argumentum solis elice

[illegible] per auge saturni sive alterius planete [illegible] medio ac auge [illegible]
[illegible] argumentum solis mediante motu eius medio ac auge [illegible] per [illegible] subtrahe
hoc medio invento medio motu solis per quarta ac auge [illegible] [illegible] subtrahendo [illegible] non posset et [illegible]
[illegible] medio motu solis accomodata revolucione [illegible] medium motum solis per 20 die Aprilis
auge [illegible] argumentum solis. Verbigracia medium motum solis per 20 die Aprilis
quod suppositum est argumentum solis [illegible] quarta [illegible] [illegible] 1 [illegible] 21 18 [illegible]
et 10 [illegible] minuta 26 2 70 [illegible] quarta [illegible] si subtrahatur a medio motu [illegible]
aut solis per precedentem [illegible] 1 0 [illegible] si quocumque tempore operari licebit
argumentum solis 10 6 26 37 [illegible] et sic [illegible]

## Centrum lune pro quocumque ~~anno~~ tempore invenies sive [illegible]

Iuxta doctrinam [illegible] medium motum lune sicut argumentum medium per [illegible]
tempore quaerenda sunt. Centrum autem lune [illegible] [illegible] solis cum motu lune [illegible]
[illegible] medium motum lune [illegible] ad tempus [illegible] positum [illegible] solis [illegible] duplum [illegible]
[illegible] 12 signa si subtrahendo [illegible] posset et [illegible] 20 die Aprilis [illegible]
centrum lune.

## In exemplo

[illegible] volo invenire centrum lune in 20 die Aprilis [illegible] habeo medium motum
10 post meridiem minuta 26 et 2 70 [illegible] 18 ad hoc [illegible] medium [illegible] lune [illegible] intrando [illegible]
[illegible] solis [illegible] queram medium [illegible] lune quem invenio 2 10 [illegible] 26 11 ab
[illegible] solis [illegible] in tabulas lune [illegible] medium solis qui est 1 1 [illegible] 21 18 et [illegible]
hoc itaque motu subtraham illud medium solis [illegible] centrum lune [illegible] 2 7 10 9 26
distanciam lune a sole quam si duplaveris [illegible] centrum lune [illegible] Remanet
[illegible] centrum alio nomine [illegible] duplex distancia [illegible] distancie distat ab auge [illegible]
[illegible] distat a sole [illegible] tanta dupla distancia [illegible] motus solis a motu lune subtrahi
et [illegible] per invenimus centrum lune [illegible]
debet deinde duplari

## Medium argumentum cuiuslibet trium superiorum ad tempus datum elice

Argumentum [illegible] [illegible]
motu solis [illegible] [illegible]
[illegible] [illegible] tempore [illegible] aliquando [illegible] habere [illegible] ad hoc [illegible]
[illegible] medium motum solis [illegible] medium motum planete [illegible]
[illegible] argumentum habere [illegible] subtrahe medium motum planete
[illegible] a medio solis motu [illegible] argumentum.

## Verbigracia

Vellem habere medium argumentum saturni ad [illegible] dies Maii [illegible] post

ix

in medium motum [illegible] ad hoc tempus medium motum solis signa 1 29 16 31 et [illegible] medium Saturni motum 6 18 et 21 38 Subtracto igitur medio motu Saturni a medio motu Solis habebis argumentum Saturni 1 11 et 16 7 Eodem modo facies in Ioue et in Marte

## Centrum medium in quinque planetis per assignato tempore inuenire explanare

Cum medium motum planete per quantitatem et eius augis per quantitatem ad hoc tempus quod designasti Subtrahe tandem augem planete de eius equali motu et fecisti medium centrum

## Exemplariter

medius motus Saturni per tempus die Mai et [illegible] 6 de iste 6 18 et 21 38 Aux uero eius ad idem tempus 8 et 29 6 31 minima quo peractam augem de medio motu et est medium centrum Saturni scilicet 10 7 17 1 Similiter operaberis de tua Ioue Marte et Venere et Mercurio per eos equales motus et auges

x

## Modum per quem medios motus in tabulis esse correctos experiamur inserere

Primo in tabulis duorum collectorum quorumlibet per motum suum de 20 annis [illegible] qui quidem motus [illegible] in ultimo duorum [illegible] equarentur itaque [illegible] dubitationem subtrahe [illegible] et facta subtractione si manet motus qui est positus pro uiginti annorum [illegible] si non [illegible] esse oportet Examinabis [illegible] alias duas [illegible] precedentes similiter et quas in [illegible] ab una [illegible] examinabis [illegible] per motum 20 annorum usque quo peruenies ad illa [illegible] et quousque motum inuenies per [illegible] ille [illegible] in [illegible]

## In annis autem expansis

Tabula

Motum [illegible] per additionem [illegible] prime [illegible] ad [illegible] habenda secunda et tertia per habenda et cetera Ubi autem motus anni bisextilis [illegible] debet ibi ultra talem additionem motus unius diei [illegible] et [illegible] tibi [illegible] foret [illegible] precedentem [illegible] et si [illegible] prima [illegible] tabule [illegible] motus Si autem [illegible] per additionem [illegible] motum precedentem de illo qui est anni bisextilis subtrahes amplius motum unius diei de [illegible] et tunc manebit prima [illegible] si fuerint motus [illegible]

## Quantum uero ad tabulas mensium

Prima [illegible] tabule [illegible] ultra [illegible] de tabulis dierum reliquorum [illegible] motus sunt [illegible] precedentis mensis motum tot dierum motu quot ipse mensis [illegible] habere [illegible] habuit [illegible] dies ut si [illegible] motum [illegible] addere motum Ianuarii 28 dierum motum per anno communi 29 per anno bisextili Motus item mensium in anno bisextili solum [illegible] anno [illegible] anni communi per motum unius diei quare si [illegible] a februario [illegible] de tabula anni communis motum unius diei [illegible] formabitur motus mensium in tabula bisextili anno [illegible]

## Tabule centri in diebus

[illegible] per motum unius diei [illegible] tabule horarum per motum unius hore [illegible] de quibuscumque [illegible] esses pari modo [illegible] ad [illegible] antecedentem motum a sequente semper prima [illegible] debet hec [illegible] tabularum de mediis motibus Et [illegible] ad motus [illegible] planetarum [illegible] tradita sunt [illegible] ad [illegible] per [illegible] modum [illegible] equalem motum [illegible] [illegible] Almanach [illegible] possit

xi

## Medium motum solis similiter lune ac sui argumenti ad dies equales per totum annum computare

Scribe radicem illam anni tunc [illegible] computare motum deinde accipe motum unius diei de tabula dierum similiter [illegible] tunc radicem [illegible] et [illegible] adde radici et habebis motum [illegible] ad Ianuarii [illegible] ad [illegible] prima dierum Ianuarii in [illegible] ad hoc [illegible] Ianuarii [illegible] motum unius diei adde motum inuento ad prima Ianuarii habebis [illegible] [illegible] motum [illegible] ad [illegible] ubi [illegible] ultima Ianuarii [illegible] tandem [illegible] ne quopiam modo [illegible] in addendo accipe motum de tabula mensium [illegible] anni [illegible] bisextilis [illegible] Ianuarii positum in tabulo [illegible] solis [illegible] de sole In tabula [illegible] lune [illegible] cuius motum [illegible] et [illegible] radici adde Nam sic tibi [illegible] motus ad ultimam diem Ianuarii [illegible] in [illegible] ubi autem [illegible] quod [illegible] motum [illegible] et [illegible] emenda [illegible] autem motus tibi [illegible] motus: [illegible] radicem

[illegible]

Cum scribe per ultima mensis et ab ipso motu dierum sequentis mensis continua. Eodem autem modo quo prius velis ad ultimam diem cuiuslibet mensis certificaris in recte operatus sis accipiendo scilicet motum de tabula mensium mensis de [illegible] ultimam accipiens radici semper addendo. Hoc namque pacto habebis motum [illegible] errando per singulis anni diebus in medio augis. **Exemplum** Radix medii motus solis ad principium anni currentis domini 1482 est 9. 18. 11. 31. 28 motus ad unum diem 59 8 20. Quare si addideris radici prouenit motus ad primam Januarii 9 19 10 39 48 scilicet ... ergo eum ponas primam dierum in [illegible] et addas iterum predictum motum unius diei motui invento ad primam et prouenit ad secundam Januarii scilicet motus 9 20 13 28 8 et sic usque ad ultimam Januarii et ideo de medio lune per eius radicem et motum in uno die. Similiter de argumento eius medio facies per suam radicem et per unius motum unius diei ... examinando ultimam augis mensis ut pateret in canone.

## Centrum lune per singulos dies anni extendere

Recipe radicem medii motus lune et sub ea scribe radicem solis subtrahendo et post subtractionem superexcrescens duplabis, tam taliter inventum per duplacionem est radix centri lune. Continuabis itaque ab ea radice centri lune per additionem successiuam motus centri lune in uno die que invenies in tabula intitulata tabula centri lune in diebus. Et eundem et examinabis ultima mensis augis per motum de tabula mensium centri lune ducatur per omnia faciendo ut in precedenti dictum est. **In exemplo** Radix medii motus lune est 1. 27. 3. 6. 30. Solis vero ista 9 18 11 31 28. Huic motui solis si subtraxeris manebit 4 6 1 30 36. Accipias ergo eius duplacionem et erit radix centri lune 8 12 17 9 12. Accipias ergo eius [illegible] et addas radicem centri lune et erit lune in uno die quod 0 24 22 13 23 et addes radici et ... primam Januarii ... centrum ad primam Januarii 9 6 38 3 17 98 ... et sic ad ultimam mensis quam examinabo motum lune et per argumentum eius in eodem et ... esse verum sicut in precedenti et examinabo deinceps medii ...

## Medium motum augis trium superiorum de 10 in de 10 perficere

Sufficit habere motum medium ... dierum trium superiorum de decem diebus in decem dies. Et tum habitis aliquis in medio trium medii vero [illegible] eum contrahentem facile ut infra docebitur. Scribe ergo radicem trium medii ... et recipe in tabula dierum cuiuslibet planete cuiuslibet istorum ... motum talis planete et ... radici ... et habebis motum ad decem Januarii motum ... ponendo quote diei fuerit mense super intitulato ... ponendo in [illegible] diebus adde huic primo prouenienti et prouenit ad 20 Januarii. Iterum eundem motum decem dierum adde ... et talem continua per omnes menses semper signando menses quos ut potes ... et quote dies mensis fuerit motus **Pro exemplo** Saturni. Habeo radicem anni currentis 1482 medii motus 6 12 38 33 39 ... et motum eius Saturni decem dierum est 0 0 20 7 13 et eum addas predicte radici prouenit ... motus Saturni ... 6 12 58 39 ... signando ... ad decem Januarii et ad finem eius ... fit decime diei ad ... Januarii et adde ... prouenit et prouenit 6 12 18 47 36 et omnia ... signando ... vigesime et ... in omnibus mensibus anni ... ut ...

## Argumentum equale augis trium superiorum per denarios similiter ordinare

Recipe radicem medii motus solis et radicem planete de qua intendis subtrahe tunc radicem planete de radice solis et ab hac radice [illegible] et manebit radix argumenti medii planete. Et ab hac radice ... hoc modo recipe medium motum ... tibi debes argumentum planete decem dierum ... planete totidem dierum ... motum planete solis decem dierum ... medium motum planete ... et argumentum medium planete decem dierum ... motum solis hoc namque pacto illud ... argumenti planete et habebis argumentum planete ad decimam Januarii ... ergo adde radici argumenti planete ... medium motum planete per decimam Januarii ... **In exemplo** ... sicut ... medio ... motibus eorum. Radix medii motus solis est 9. 18. 11. 31. 28 per anno quo ... radix vero Saturni medii motus 6. 12. 38. 33. 36 et ... detracto de radice solis in medio eius motus ... 3 7 16 41 38 ... manebit radix medii argumenti Saturni ... alia argumenta formabo ... argumentum 10 dierum talis medii motus solis decem dierum est 0. 9. 51 23 16. Saturni vero est 0 0 20 7 13. Subtraha ... argumentum medium Saturni decem dierum ergo Saturni motum de motu solis et est ... adde radici argumenti Saturni et prouenit ... 0 9 31 16 23 ... ponam ergo illud ... argumentum per 10 Januarii ... 3 16 28 17 1 ... Januarii ... motum Saturni ... decima Januarii ...

14

## Centrum medium eorundem cum augium per decem dies continue preparare

Accipe radicem medii motus planete et deinde radicem sue augis [illegible] radix centri medii planete. Ceterum radici augis huius planete adde motum augium decem dierum et hic erit aux planete pro decima Januarii. Eam itaque augem pro decima Januarii subtrahe a medio motu planete sumpto eadem decima Januarii pro tredecima formabitur centrum planete ad 10 Januarii. Sub illud pones medium et argumentum eiusdem planete cum augis. Tandem radicem centri planete subtrahe de centro invento ad decimam Januarii, illud quod [illegible] erit centrum medium planete decem dierum pro quo omnia centra in eadem planeta [illegible] eadem ad medios motus et argumenta collocando. Verbi gratia radix medii motus Saturni que post 6 [illegible] 38 33 70 augis sue [illegible] 8 [illegible] 48 [illegible] 17 facta subtractione manet 10 0 39 39 57 radix centri Saturni. Adde deinde radici augis motum augium 10 dierum [illegible] et erit aux pro 10 Januarii 8 [illegible] 48 [illegible] [illegible] qua subtracta de medio motu Saturni pro 10 Januarii invento pro tredecima venit ab hoc 6 [illegible] 48 39 [illegible] et fiet centrum Saturni pro eadem 10 [illegible] 10 0 49 [illegible] [illegible] sumabo pro ad decimam Januarii et [illegible] finaliter subtrahendo radicem centri Saturni venit 10 0 39 39 57 de centro decime diei quod est 10 0 49 [illegible] formabo mihi centrum decem dierum venit 0 0 20 [illegible] 41 pro quo omnia sequencia per ordinem deducta.

## Centri medii duorum inferiorum

[illegible] [illegible] Veneris quidem continuando [illegible] in 7 dies sit [illegible] accipiatur centrum Veneris ex parte 7 dierum et illud addatur radici centri Veneris invente pro [illegible] et producto erit centrum pro quarta die Januarii et sic pro omnibus mensibus. In Mercurio [illegible] fiat ad tres dies [illegible] sumendo de [illegible] tabula centrum ex parte [illegible] dierum. [illegible] ad [illegible] tabulis petendum [illegible] satis abunde in precedentibus similes [illegible] oculis subiectum sit

## Centrum medium eorundem inferiorum per ordinem formare

Facias tibi primo centrum Veneris [illegible] dierum [illegible] subtrahe radicem augis solis de radice medii motus eiusdem [illegible] Veneris quemadmodum [illegible] solis [illegible] in loco [illegible] erit radix centri. Deinde de quarta die Januarii assumendo medium motum solis et pro eadem quarta inveniendo augem Veneris [illegible] solis [illegible] [illegible]. Subtrahatur augem de medio motu et erit centrum pro quarta Januarii [illegible] hic quo centro [illegible] radicem centri Veneris [illegible] erit centrum [illegible] dierum pro quo singula alia calculabis. Similiter eodem modo fiat in Mercurio pro [illegible] augis et mediorum motuum solis sumpto [illegible] ad motum [illegible] dierum et [illegible] sufficiat [illegible] motuum [illegible] debet pro almanach [illegible] [illegible]

## Ordinem tabularum in equacionibus exponere

Solet communiter in omnibus equacionum tabulis [illegible] equaciones in spacio [illegible] gradum [illegible]

## Differencie

[illegible] equacionum [illegible] aliud [illegible] [illegible] ad [illegible] sequentes [illegible] equacionum [illegible] collocate. Circa has et equacionum [illegible] [illegible] [illegible] infra [illegible] titulis [illegible] notande [illegible] [illegible] fiat [illegible] subtrahe [illegible] [illegible] adde subtrahe [illegible] [illegible] [illegible] [illegible] [illegible] titulus [illegible] et hic [illegible] tabulas [illegible] quibus [illegible] [illegible] [illegible] superior titulus sunt [illegible] [illegible] tabule [illegible] [illegible] equacionum sub paragrapho [illegible] [illegible] sunt in fronte tabule gradus quos habemus ultra signa [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] equacionum [illegible] [illegible] in linea [illegible] sub hac equacionum titulo [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] signum in [illegible] tabule [illegible] [illegible] [illegible] in prima linea [illegible] [illegible] [illegible] equacionum in [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] in linea [illegible] titulus [illegible] [illegible] signum [illegible] [illegible] debebis in tabula itaque [illegible]

## Octave spere

[illegible] tabulate sunt 30 [illegible] tabelle [illegible] [illegible] ad [illegible] [illegible] signa ille equaciones sunt [illegible] [illegible] duodecim sequentes [illegible] super tabellas [illegible] signa a [illegible] ad [illegible] [illegible] [illegible] ad 6

Exclusive similiter cum eorum oppositis in tabulis autem **Solis** ponitur sex tabule [illegible] tulates quomodo extense sunt per medietatem tituli. Et in frontibus earum signa a [illegible] ad sex exclusive. Et in pedibus [illegible] ad undecim situantur [illegible] earum [illegible] quas formant doctrinales per medietatem augmentum tituli secundum processum graduum [illegible] medietate a contrario dant dumtaxat ordine converso situato ubi ille sunt [illegible] Et ubi [illegible] a sinistris a dextris locati [illegible] hac enim computatorum medietas una tituli dupplicatem [illegible] sortita sunt [illegible] altera situabit. Hec in alio [illegible] ubi [illegible] signum [illegible] Et ubi [illegible] quadragesimum [illegible] gradum computaverit inde signum alterius [illegible] tibi [illegible] gradus a sinistris [illegible] signis in fronte [illegible] ac demum signum in pede et invenies ad gradus a dextris [illegible] **In luna** autem tabule et aliis planetis sic [illegible] sub unoquoque signorum plures tabule sunt equationum tabelle [illegible] motus plures et eorum diversitates tam [illegible] centrica [illegible] et titulis [illegible] longitudinum [illegible] nobis et titulis titulantur [illegible] ad theoricas pertineat [illegible] sufficiat

**De veris motibus**

**Augem omnium patefacere** [illegible] motum augium et stellarum fixarum [illegible] inventum per quarta [illegible] ad tempus a te propositum. Item motum accessus et recessus octave spere. Tandem cum signa et gradus [illegible] motu octavi celi [illegible] in tabula equationum [illegible] octave spere et in [illegible] et a gradu [illegible] equatoris [illegible] et cum titulo [illegible] Tandem [illegible] ad [illegible] equationis [illegible] suo titulo [illegible] equatorum [illegible] Tandem [illegible] gradus octave spere in motu [illegible] sex [illegible] alia parte [illegible] equationem [illegible] debes in locis [illegible] multiplicationem [illegible] colligere productum [illegible] equationum correspondentis [illegible] motu [illegible] celi [illegible] in tabulis [illegible] tabulate sunt ad gradus [illegible] non [illegible] ultra [illegible] habeamus fractionis [illegible] equationem [illegible] multiplicationem adde aut subtrahe [illegible] titulo [illegible] Equationem [illegible] equationem [illegible] et pro gradibus et ceteris fractionibus inventa [illegible] equationem [illegible] motum augium et stellarum fixarum [illegible] quem [illegible] completa. Tandem [illegible] auge [illegible] augium [illegible] planete [illegible] et pervenies [illegible] planete habent [illegible] planetarum [illegible]

**In exemplo** volo [illegible] auge [illegible] ad [illegible] ad tempus a te [illegible] motum augium et stellarum 0 10 [illegible] [illegible] 8 [illegible] Invenio quidem [illegible] 2. 17. 22. 30. 24. intrando autem tabulas motus accessus et recessus octave spere [illegible] signorum et gradus 17 [illegible] equatio 8. [illegible] equationum [illegible] 28 titulus [illegible] in fronte tabule [illegible] et signum demum [illegible] titulo [illegible] gradum [illegible] 2 22 [illegible] equationis [illegible] ultra gradus et [illegible] in motu octave celi [illegible] equatio [illegible] titulus [illegible] 16 et [illegible] equationem equatam 8. 12. 21. 16 [illegible] motum augium et stellarum [illegible] fractionibus in motu octave celi [illegible] Si itaque habere velles augem [illegible] 8. 19. 3[illegible]. [illegible] [illegible] in tabella subscripta [illegible] planete ad [illegible] ad augem [illegible] factum est

| Radices augium pro tempore nativitatis christi | S | G | M | 2 | 3 | |
|---|---|---|---|---|---|---|
| | 2 | 11 | 27 | 23 | 4 | Solis et veneris |
| | 7 | 23 | 23 | 42 | 4 | Saturni |
| | 5 | 3 | 31 | 0 | 4 | Jovis |
| | 3 | 27 | 12 | 13 | 4 | Martis |
| | 6 | 10 | 39 | 33 | 4 | Mercurii |

19

20

## Verum locum solis pro tempore invenire

proposito habeas primo ad tempus propositum medium motum solis per quartam, habeas insuper augem eius per quintam et similiter argumentum eius per sextam. Cum quo argumento intra cum eo tabulas equationum solis gradus signa autem [illegible] gradus vero a latere et de angulo [illegible] [illegible] et signi tolle equationem solis sibi debitam [illegible] titulis [illegible] deinde totalem differentiam in residuum argumenti et proveniet tibi pars proportionalis quam partem adde aut subtrahe ab equatione [illegible] exigentiam tituli differentialis prodibit equatio equata. Tam itaque equationem equatam adde medio motui solis si sit [illegible] titulus [illegible] aut subtrahe de medio motu solis ubi occurrit titulus subtrahendi et erit inventus [illegible] locus sub quo sol erat pro tempore posito in zodiaco primi motus.

**Exemplum.** Medius motus solis per quartam inventus est 1 1 51 21 18 aux autem per quintam 3 1 0 47 [illegible] [illegible] [illegible] auge et motu extractum est residuum argumentum per sextam 10 6 46 33 [illegible] intrando itaque cum hoc argumento in tabulas equationum solis [illegible] equationem 1 47 [illegible] cum ipsius titulo adde [illegible] 1 [illegible] cum titulo [illegible] quam differentiam [illegible] in minuta [illegible] et [illegible] argumenti et colligo partem proportionalem 1 1 38. Subtraho igitur hanc partem proportionalem de equatione [illegible] relinquitur equatio equata 1 51 46 26 quam [illegible] equationem equatam cum habeat adde [illegible] medio motui solis addam et proveniet michi verus locus solis in zodiaco primi motus 1 [illegible] 29 1 [illegible] [illegible] 20 aprilis hora decima post meridiem 1 [illegible] 46 2 10 3 18 [illegible] nam tempus fuerat positum in quarta.

## Punctum zodiaci verum sub quo sit centrum lune pro tempore statuto

[illegible] quarta motus et argumenti lune medium [illegible] [illegible] sunt per septimam vero centrum lune cum mediante tribus [illegible] erit verus locus lune pro tempore posito [illegible] aut [illegible] [illegible] patet. Sed tamen pro centro lune duas equationes debere equationem videlicet centri et minuta proportionalia pro argumento autem similiter duo equationem argumenti et diversitatem dyametri circuli brevis. Insuper [illegible] acceptis de tabulis equationum [illegible] illius pro parte proportionalem [illegible] [illegible] [illegible] differentiam [illegible] aut residuum ultra gradus [illegible] [illegible] [illegible] proportionalis quod debet intra itaque tabulas equationum lune [illegible] [illegible] [illegible] [illegible] [illegible] centri lune et in tabula cum titulo [illegible] centri ex opposito [illegible] lateris equationem centri in [illegible] et minuta [illegible] [illegible] [illegible] [illegible] [illegible] sub centro lune [illegible] loca sua intitulando quodque ipsius titulo. Recipe item [illegible] ex opposito [illegible] lateralis gradus sub titulo minuta proportionalia in [illegible] et [illegible] cum titulo [illegible] [illegible] et differentiam [illegible] [illegible] [illegible] [illegible]. Et [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] per partem proportionalem puta [illegible] differentiam equationis centri in residuum centri lune. Et [illegible] [illegible] [illegible] [illegible] [illegible] quali parte [illegible] sub illo [illegible] [illegible] [illegible] [illegible] [illegible] proportionalibus [illegible] titulo [illegible] [illegible] [illegible] addendo aut subtrahendo ab equatione [illegible]. Sic cum habes equationem centri sibi minuta proportionalia [illegible]. Et [illegible] [illegible] [illegible] centrum lune [illegible] [illegible] equationem vero centri illa [illegible] adde aut subtrahe [illegible] [illegible] [illegible] titulo medio argumento lune et prodibit verum argumentum lune. Exemplum [illegible] [illegible] equationem centri non indigeres. Cum itaque [illegible] veri argumenti signa [illegible] in titulo [illegible] lune et in tabula cum titulo [illegible] argumenti. Recipe equationem argumenti [illegible] [illegible] [illegible] cum titulis amborum [illegible] sub argumento lune. Et [illegible] [illegible] sub titulo [illegible] dyametri [illegible] [illegible] illic [illegible] et [illegible] [illegible] cum titulo [illegible] [illegible] [illegible] loca sua [illegible] minuta proportionalibus [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] equationem argumenti [illegible] dyametri [illegible] proportionalem [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] habebis equationem argumenti et [illegible] dyametri equatam [illegible] [illegible]. Et [illegible] [illegible] [illegible] [illegible] [illegible] omnia minuta proportionalia per totam diversitatem dyametri [illegible] sub [illegible] equationem argumenti [illegible] [illegible] [illegible] adde [illegible] [illegible] [illegible] argumenti [illegible] et [illegible] equationem argumenti cum [illegible] sibi [illegible] [illegible] titulo [illegible] medio motui lune [illegible] [illegible] verus locus [illegible] aut de medio motu lune deme si sit subtrahe [illegible] [illegible] [illegible] punctum [illegible] quem possidet centrum lune pro illo tempore in zodiaco primi motus.

**In exemplo.** [illegible] [illegible] medius motus lune [illegible] 20 aprilis hora 10 [illegible] 46 2 40 3 18 [illegible] 1 10 22 26 11 argumentum autem 11 20 47 49 3. Centrum vero inventum per septimam 2 7 10 9 [illegible] intrando [illegible] in tabulas equationum lune [illegible] signa centri lune duo in fronte tabule gradus autem [illegible] in latere sinistro [illegible] [illegible] [illegible] equationem centri 4 19 [illegible] 1 minuta et [illegible] titulo adde [illegible] [illegible] [illegible] gradus [illegible] sub titulo minuta proportionalia invenio 17 minuta cum nulla [illegible]. [illegible] [illegible] minuta [illegible] partem [illegible] [illegible] equata cum nulla habeant differentiam sive equationem. Equabo itaque equationem centri [illegible] differentiam sua [illegible] 1 minuta in residuum centri et [illegible] michi pars proportionalis equationi centri addenda 1 11 8 quam adda et erit equatio centri [illegible]

equata 9 16 11 8 et cum ipsa fuit de titulo additionis adiungam eam medio argumento centri equata [illegible] 0 8 2 10 11 per quod querere debeo equationem centri [illegible] hoc verum argumentum lune [illegible] et diversitate diametri. Et cum ipsum nihil habeat tamen in signis [illegible] argumenti et [illegible] etiam nihil habebit in equatione argumenti. Similiter in diversitate quod est gradibus argumenti [illegible] equationes [illegible] que est [illegible] per fractionibus talibus invenimus tamen quod ad argumentum [illegible] quo ad diversitatem [illegible] argumenti que ponitur penes primum gradum sub nullo signo in [illegible] verum argumentum lune. Et cum [illegible] equatio argumenti equati 8 0 10 20 cum titulo subtrahe [illegible] accipiendo primam diversitatem que ponitur apud primum gradum et [illegible] diversitatem [illegible] equata 0 6 qua ponitur ad minuta proportionalia ducasque eam in eadem minuta et [illegible] 1 30 que iterum [illegible] addere debes equationi argumenti equate. Et aggregatum [illegible] 0 0 11 10 [illegible] titulum argumenti addere aut subtrahe. In hoc loco [illegible] subtrahere debeo in medio motu lune [illegible] verus locus lune habeatur [illegible] ad tempus prescriptum 2 10 22 16 21. Si [illegible] nichil in signis nihil [illegible] in gradibus medium motum [illegible] tibi occurret verum argumentum lune nihil in signis [illegible] verus locus. Nam lune ibi fit medius et verus locus [illegible] sine ulteriori operatione [illegible]

## Verum locum zodiaci sub quo sit quispiam quinque planetarum calculare

[illegible] quibus calculari debeat verus locus [illegible] quinque planetarum. Primo inquiras medium motum per quartam [illegible] argumenti medium in tabulis [illegible] superioribus [illegible] octava. In diebus vero [illegible] medium per [illegible] quo [illegible] habeant tabulas per equationes. [illegible] centrum medium per [illegible] quo [illegible] tabulis [illegible] solum equationem centri, eo modo quere in tabulis [illegible] centro itaque medio inveniendo [illegible] tabula et in columna [illegible] intitulata [illegible] planete [illegible] centri [illegible] aut a dextris [illegible] ducto gradu centri [illegible] signando titulo suo. Multiplica [illegible] centri [illegible] titulus equationis centri [illegible] aut subtrahe [illegible] equata formare debes centrum et centrum [illegible] equata [illegible] equatio centri equata [illegible] equatio centri habuerit et cetera [illegible] epicicli motum [illegible] subtrahe [illegible] argumentum [illegible] titulo adde [illegible] medio centro [illegible] argumentum additionis titulus adde [illegible] medio motui planete. Si [illegible] habebis verum motum [illegible] medio centro adde [illegible] medio motui [illegible] titulo [illegible] subtrahe [illegible] a medio centro [illegible] centrum verum. Et si equatio centri est [illegible] argumento medio et formata [illegible] habendo vero et [illegible] motu planete adde [illegible] titulo [illegible] centri equata [illegible] equatio [illegible] centri equata [illegible] argumento vero [illegible] titulo [illegible] In equatione [illegible] centro et epicicli loco [illegible] argumenti vero [illegible] centri non [illegible] tabellis equationum [illegible] tabella fecerit amplius equationem centri [illegible] gradus et [illegible] immediate [illegible] planete [illegible] centri [illegible] titulo [illegible] ad partem [illegible] titulo minuta proportionalia in [illegible] ad argumentum [illegible] longior [illegible] aut [illegible] centro [illegible] equatio [illegible] argumenti et [illegible] longior [illegible] proportionales [illegible] quo mediante duo sunt invenienda equatio [illegible] argumenti veri in tabulis [illegible] quo mediante [illegible] sub titulo tabelle [illegible] diametri [illegible] Et [illegible] gradum [illegible] diversitas diametri [illegible] et ubi invenies [illegible] planete [illegible] et [illegible] positas [illegible] quoque [illegible] planete [illegible] in gradibus et [illegible] longitudinum di[illegible] argumenti [illegible] de altera tabella [illegible] titulus [illegible] Si [illegible] diametri [illegible] sunt [illegible] longior [illegible] titulus [illegible] minuta proportionalia per [illegible] titulo [illegible] Si habeat [illegible] longitudo longior. Similiter [illegible] debes [illegible] longitudo proportionalibus per loca sua [illegible] argumenti [illegible] diversitate per parte [illegible] sub minutis proportionalibus [illegible] argumenti equata. Similiter [illegible] titulo equa [illegible] habebis equationem argumenti [illegible] proportionales [illegible] habenda multiplica minuta proportionalia per diversitatem [illegible] finali equatione habenda [illegible] equationem argumenti per loca sua [illegible] multiplicandos [illegible] subtrahendo equationem argumenti [illegible] longior [illegible] subtrahe [illegible] producta [illegible] titulus minutorum proportionalium [illegible] adde [illegible] equationem argumenti [illegible] Si [illegible] inventa [illegible] ergo equationem [illegible] Si habet [illegible] argumenti [illegible] loco epicicli [illegible] Aut si habet [illegible] subtrahe [illegible] equatio argumenti [illegible] titulum additionis adde [illegible] loco epicicli [illegible] calculasti verum locum planete in zodiaco [illegible] ab eodem loco vero epicicli. Si [illegible]

primi mobilis [illegible]

## Exemplo facilius comprehendes

Verbi gratia in anno quo [illegible] Marcii hora sexta post meridiem assumo [illegible] medium motum [illegible] ... 6 ... 21 58 assumo et argumentum medium [illegible] per octavam [illegible] ... 11 ... 16 ... Similiter centrum medium per nona [illegible] 10 ... 17 1 et intrando tabulas equacionum [illegible] signa centri [illegible] gradus aut a dextris [illegible] sub titulo equacio centri [illegible] equacionem [illegible] in titulo adde [illegible] ... 21 0 [illegible] ... 8 39 0 [illegible] medio centro [illegible] argumento [illegible] centrum [illegible] locus [illegible] 6 22 ... 0 58 verum argumentum ... 6 ... 21 ... Centrum verum 10 10 ... 1 [illegible] equacionem centri [illegible] intrabo [illegible] tabulas equacionum [illegible] titulo longior [illegible] titulo [illegible] tabella [illegible] titulo [illegible] argumenti [illegible] 6 [illegible] signa [illegible] Item [illegible] longitudine longiori [illegible] diametri [illegible] diversitate diametri [illegible] argumenti equati [illegible] 21 22 diversitas diametri [illegible] argumenti [illegible] equacionis [illegible] longitudine longiori [illegible] argumenti [illegible] equacio argumenti secundo [illegible] Si [illegible] diversitate [illegible] longitudine [illegible] Ista [illegible] equacio argumenti [illegible] loco [illegible] 19 19 [illegible] titulo [illegible] subtrahatur [illegible] vero loco centri equacionis [illegible] 6 23 ... 36 [illegible] in primo mobili ad [illegible] 19 22 121 [illegible] fac in aliis planetis.

## Cautelas in operacione custodiendas explanac[ione]

Prima si contingat centrum aut argumentum [illegible] nihil esse in signis nihil [illegible] in gradibus et aliquid in [illegible] nulla [illegible] equacio [illegible] signis [illegible] aut [illegible] fraccionibus [illegible] centri [illegible] argumenti [illegible] longitudinis [illegible] habenda diversitate [illegible] tabula sub nihil in signis [illegible] equacionem [illegible] gradum [illegible] equacionem [illegible] illa [illegible] fracciones [illegible] equacio [illegible] sicut titulus [illegible] Si [illegible] equacionem [illegible] error [illegible] in luna [illegible]

**Alia** quando haberes motum [illegible] in tabulas equacionum aliquid in signis nihil [illegible] in gradibus [illegible] 1 30 [illegible] tabule [illegible] quoniam 30 gradus [illegible] signo aut quoto [illegible] in tabulis equacionum.

**Alia** [illegible] equacionis [illegible] tabulis [illegible] equata [illegible] habenda [illegible]

**Alia** Si in [illegible] proporcionalibus [illegible] diversitas diametri [illegible] equacionem argumenti [illegible] complendum est.

**Alia** Si minuta proporcionalia fuerint sexaginta ipsa tota diversitas [illegible] et addi aut subtrahi [illegible] equacionem argumenti equati [illegible] habeatur equacio argumenti [illegible] 

## Si planeta sit retrogradus aut directus cognoscere

Per argumentum verum sive equatum planeta cognoscitur directus aut retrogradus [illegible] animadverte signa argumenti veri et gradus illius planete [illegible] signos argumenti gradus [illegible] apud maiorem [illegible]

Longe

Argumenti praedicto planeta est directus. Si vero in perigeo planeta retrogradus est. At si signa argumenti inventa fuerint in fronte tabule stacionis [illegible] eiusdem argumenti praescrutabis [illegible] maioris equacionis argumenti stationarius est prima statio a qua planeta incipit retrogradari. Si vero signa [illegible] fuerint in pede tabule gradus tunc mediante in perigeo planeta est in statione secunda a qua incipit dirigi [illegible] non nisi [illegible] quomodo est. Nam si aliter [illegible] sive cupias per centrum verum accipe de tabulis stacionum prima et [illegible] signis subtrahe residuum erit [illegible] istud est punctus stacionis secunde. Unde [illegible] si alterum [illegible] stacionum argumenti residuum [illegible] planete sit equale praedicto in illa statione planeta tunc erit. Et si cadat intra verum planete sit [illegible] retrogradus est si extra directus. Omnium [illegible] hec valeo eam stationem [illegible]. Si enim argumentum lune verum sit [illegible] an linea in superiori an in inferiori parte epicicli constat. Si enim argumentum lune verum sit [illegible] aut plus octo in signis et 27 in gradibus [illegible] in signis et quinque in gradibus [illegible] sub perigeo qui ponitur [illegible] in superiori parte epicicli [illegible] Si vero argumentum fuerit plus tribus signis et [illegible] gradibus aut [illegible] equacionis argumenti [illegible] octo signis et 27 gradibus praedicto [illegible] in inferiori [illegible] epicicli declinat. Et [illegible] sub perigeo [illegible]

## Verum locum Genzahar lune reperire

Genzahar lune dicitur punctus eccentrici lune ille qui consistit sub ecliptica a qua altera medietas eius eccentrici ad septentrionem altera austrum versus declinat qui vulgo dicitur caput draconis. Cuius [illegible] verum locum facillime [illegible]. Invento namque eius medio motu per quartam ad [illegible] ex [illegible] signis ablato quicquid residuum fuerit erit verus locus Genzahar lune [illegible] non fuerit [illegible]. Locus vero secundum longitudinem omnes [illegible] augis planete [illegible] almanach zodiaci per tempus quodcumque [illegible] lune [illegible] debet.

## Qualiter verum locum solis per totum annum in celestibus ostendatur edocere

[illegible] verum locum solis ad primam Januarii diem iuxta doctrinam vigesime que [illegible] Januarii [illegible] in almanach [illegible] Januarii [illegible] ad primam Januarii [illegible] verum locum ad primam Januarii [illegible] Januarii [illegible] medium motum solis per [illegible] Januarii [illegible] solis sequitur [illegible] ad primam Januarii [illegible] solis [illegible] medios motus solis [illegible] verum locum solis [illegible] medios motus et per equacionem [illegible] cum titulo [illegible] medio motu [illegible] verum locum solis [illegible]

**In exemplo** volo [illegible] verum locum solis ad primam [illegible] 1482 [illegible] 9 20 38 11 2 et [illegible] 9 19 [illegible] in almanach [illegible] 1 16 17 [illegible] 3 [illegible] 0 [illegible] Januarii [illegible] 9 21 39 [illegible] Januarii [illegible] 0 21 [illegible] Januarii et [illegible] 9 [illegible] 1 16 17 [illegible] ad primam [illegible] Februarii [illegible] medius motus ac equacionis [illegible] tabule [illegible] motus [illegible] per perigeum ponitur. [illegible] equacionem [illegible] titulo [illegible] secundum titulos [illegible] ad equacionem [illegible]

## Verum motum in quolibet pro diebus intermediis in almanach estimare

[illegible] medius motus in tabulis superioribus [illegible] estimare. Iuxta [illegible] motus per [illegible] dierum [illegible] diebus in [illegible] motus verus ubi [illegible] maior fuit successive procedendo. [illegible]

24

Genzahar 3

26

27

verum

addicio

precedente sicut in planeta directo si contingit subtrahe precedentem de sequente [illegible] si fuerit per
[illegible] dividendo [illegible] in quociente [illegible] verus locus unius diei per prime [illegible] motus [illegible] dierum
intermediorum [illegible] addendo eum [illegible] primo [illegible] vero motu precedenti. Et iterum eundem [illegible]
tam diu donec ille [illegible] 10 [illegible] inventus iterum pervenit. Simili modo [illegible] in talibus [illegible]
[illegible] Extra si [illegible] equatos [illegible] per tabulas ad hoc factas [illegible] tabula [illegible]
intermediis in Almanach [illegible] in [illegible] latere sinistro [illegible] tabule [illegible]
[illegible] aut si [illegible] in gradibus [illegible] facta [illegible]
[illegible] motus precedentis de sequente et [illegible] sub titulo tot [illegible]
[illegible] motum [illegible] sub [illegible] motu primo per loca [illegible]
intrando [illegible] possis in latere sinistro [illegible] et [illegible]
dierum sub titulo similiter tot dierum [illegible] tollet motus cum [illegible] talem ut primus [illegible]
aut [illegible] si [illegible] libro [illegible]
eo modo [illegible] si [illegible] habuit [illegible] prima [illegible] sequentes [illegible]
[illegible] motu [illegible] unius diei per [illegible] omnes intermedios
[illegible] addendo [illegible] Et [illegible] comoditas [illegible]. Quando autem sequens motus verus [illegible]
quam precedens [illegible] contingit in planeta tunc retrogrado motu [illegible] precedente de sequente [illegible]
[illegible] de precedente subtrahere debes. Tamen [illegible] dividendo [illegible] aut [illegible] in
tabulam [illegible] vero motu planete diei unius [illegible] intermedios
[illegible] ascendendo per
per [illegible] in 10 precedendo in tabulis [illegible]
[illegible] Hec autem [illegible] Cavendum est [illegible] retrogradacio a
directo [illegible] directus [illegible] similiter de 10 in 10 [illegible]
[illegible] In [illegible] tamen [illegible] retrogradacionis [illegible]
accidit [illegible] retrogradacionis aut directionis. Et in [illegible] retrogradacionis [illegible]
In [illegible] in 16 [illegible] in 3 [illegible] Et [illegible] in [illegible]
[illegible] retrogradacionis aut directionis [illegible] planeta
si non [illegible] motus [illegible] verus ad dies [illegible]
[illegible] verus [illegible] aut directi [illegible] debeat. In exemplo
[illegible] in [illegible] loco [illegible] retrogradi [illegible] ad 10 Januarii [illegible]
volo formare veros motus Saturni [illegible] ad 10 Januarii [illegible] et [illegible]
invenio verum motum Saturni ad primum [illegible] 1 4 8 2 currentibus 6 27 [illegible]
18 deinde ad 10 Januarii 6 27 23 [illegible] 10 Et [illegible] motus [illegible]
[illegible] tunc esse directum subtrahe [illegible] motum primum de sequente et [illegible]
[illegible] 10 dierum 10 19 27 [illegible] quam dividendo per 10 [illegible] pervenit
mihi [illegible] motus verus unius diei [illegible] 6 27 Et eundem [illegible] invenio
per tabulam intitulatam tabula per dierum intermediis in Almanach [illegible]
[illegible] in [illegible] motum sub decem diebus ut [illegible]
[illegible] motu unius diei per [illegible] addicione [illegible] precedenti [illegible] mihi
[illegible] motus per prima Januarii 27 6 [illegible] in Almanach [illegible] diei
Januarii et [illegible] 27 8 [illegible] decem dies ubi [illegible] pervenit [illegible]
[illegible] per 10 Januarii [illegible] singulos motus veros in singulis planetis
[illegible] verum motum 10 [illegible] sequente et precedente [illegible] ad [illegible]
[illegible] in hac [illegible] vera [illegible] vera [illegible]
[illegible] latitudines invenies.

## Qualiter formatur verus motus Capitis Draconis per totum annum ostendere

Hunc [illegible] per addicionem formabis continuam a fine [illegible] anni currentis procedendo per omnes
menses ordine [illegible] usque ad initium anni tui [illegible] ad finem anni tui
[illegible] invenies medium Capitis [illegible] subtrahe [illegible] subtractum
[illegible] fuit verus locus Capitis Draconis ad finem anni tui currentis [illegible] ad ultimam Decembris
[illegible] medium motum Capitis unius diei [illegible] ad penultimam similiter Decembris
et [illegible] ascendendo per [illegible] ordine [illegible] Verbi gratia ad finem anni
1 4 8 2 currentis medius motus Capitis Draconis est 10 16 [illegible] aut [illegible]
1 [illegible] [illegible] quod [illegible] in ultimam Decembris. Et tamen [illegible] habendo [illegible]
ad penultimam Decembris addere motum medium Capitis diei unius [illegible] 10 [illegible]
essent [illegible] gradus [illegible] motum unius diei [illegible]
penultima [illegible]. Et ascendendo [illegible] per omnes dies et menses usque pervenias ad primum
[illegible] absolutis motibus planetarum [illegible] est

## Primam coniunctionem primam que oppositionem mediam et alia quatuor invenire

Prima [illegible] que prima in diebus [illegible]
Januarii [illegible] et [illegible] diei [illegible]. Similiter de oppositione [illegible]
[illegible] currentibus intra tabulas [illegible] quos si [illegible]
invenies in eodem [illegible] habebis tempus prime coniunctionis. Similiter medium motum

Volens et linie ad hoc tempus coniunctiones cum motibus [illegible] eodem quo ad oppositionem per ipsius tabulam intellige. Et si duos [illegible] non inveneris intra cum medietatibus propinquioribus et accipe [illegible] illic posita et motum. Deinde vide quot sint anni expansi. Intra illos medietatem ac [illegible] illius tabule duos expansos intra [illegible] apud eos posita tam in tempore quam in motu et adde [illegible] coniuncta aut [illegible] a diebus collectis subtrahe 31 dies si fieri possit. Si non [illegible] primam coniunctionem [illegible] quae de tabula mensium [illegible] prima [illegible] apud februarium posita cum omnibus motibus et adiunge [illegible] inventis. Et tunc detrahe 31 dies [illegible] coniunctionem [illegible] et [illegible] quod coniunctio cum sit in diebus Januarii usualibus [illegible] februario [illegible] ad motum et [illegible] quod coniunctio [illegible] in diebus usualibus Januarii [illegible] adiudicanda [illegible] contingit alia coniunctionem esse in [illegible] februarii [illegible] prima et embolismalis [illegible] februarius fecit. Eodem de oppositione prima [illegible] prima et embolismalis [illegible] tabulas. Tabula autem [illegible] expansorum [illegible] pro coniunctionibus [illegible] tunc [illegible] cum illa sit prima oppositio [illegible] esse et oppositionibus [illegible] Vide an coniunctio prima aut vero prima oppositio sit [illegible] Januarii [illegible] februarii [illegible] in diebus oppositio vero maior [illegible] oppositio [illegible] februarii [illegible] si coniunctio sit minor in diebus [illegible] coniunctionem embolismalem [illegible] aut embolismum [illegible] prima coniunctionem [illegible] prima oppositio Januarii [illegible] Si [illegible] prima coniunctio aut [illegible] coniunctio vero plus [illegible] aliud meridianum a [illegible] oppositionibus [illegible] et si aliud [illegible] meridianus sunt occidentalis [illegible] in tempore ut in [illegible] orientalis [illegible] subtrahe [illegible] in tempore [illegible] Et [illegible] pro illo meridiano [illegible] coniunctioni aut oppositioni [illegible] coniunctiones [illegible] oppositiones per [illegible]

**Alia autem quatuor ulteriores coniunctiones** [illegible] volens [illegible] mensium intra tabulam mensium et in [illegible] mensis diebus coniunctionem [illegible] et [illegible] in tempore et [illegible] motibus et adde [illegible] coniunctionem [illegible] tolle [illegible] apud eundem mensem positos [illegible] diebus [illegible] collectis subtrahe [illegible] apud eundem mensem [illegible] in diebus [illegible] non possint [illegible] tunc [illegible] precedentis et [illegible] **Eodem modo** facies de oppositionibus [illegible] mensis precedentis [illegible] in [illegible] mensis diebus [illegible] a collecto [illegible] mensium tabula et [illegible] prius addes oppositioni [illegible] dies [illegible] qui [illegible] anni [illegible] mensis [illegible] coniunctionem [illegible] aut oppositionem in anno bisextili et intrabis [illegible] collectis [illegible] februario [illegible] vero [illegible] in diebus usualibus [illegible]

**De embolismali** [illegible] altera vero [illegible] mensis [illegible] prima embolismalis [illegible] duas coniunctiones [illegible] altera [illegible] mensis succedentis. **In exemplo** volo [illegible] anno domini [illegible] et intrando in tabulam [illegible] media [illegible] a diebus collectis

1 4 8 2 [illegible] prima coniunctionem [illegible] prima oppositionem [illegible] 31 dies a diebus collectis [illegible] collectis [illegible] et expansis [illegible] de tabula mensium [illegible] motus coniunctionum [illegible] in [illegible] possint [illegible] prima [illegible] prima coniunctio 19 [illegible] Et de detrahi [illegible] 31 dies et [illegible] prima [illegible] intrando in tabulam motibus [illegible] februarii [illegible] quo [illegible] et de aliis que [illegible] et expansis [illegible] inventa [illegible] Januarii esse [illegible] intrando tabulam [illegible] collectis [illegible] oppositionibus [illegible] in diebus [illegible] coniunctio inventa [illegible] quod oppositio [illegible] in diebus [illegible] quam [illegible] tota operatio [illegible] Hic tamen desiderare [illegible] coniunctionem in diebus [illegible] ponens [illegible] coniuncta [illegible] tam mensium [illegible] accipias singula posita [illegible] et de aliis

[illegible] 20 [illegible]

**Medias coniunctiones et oppositiones sese immediate sequentes per totum annum [illegible]**

[illegible] ad [illegible] quos precedente [illegible] illos duos que per precedentem [illegible] coniunctionem [illegible] precedit [illegible] cum [illegible] motibus. [illegible] tempus a [illegible] tunc habe [illegible] subsequentes [illegible] mensium [illegible] motibus et adde [illegible] ad oppositionem quod [illegible] subsequentem [illegible] sunt oppositio aut si [illegible] coniunctionem immediate sequentem [illegible] que cum [illegible] mensis [illegible] oppositio immediate sequens que cum [illegible] tempore et motuum [illegible] Et [illegible] per additionem [illegible] temporis et motuum [illegible] quousque placuerit per totum [illegible] anni sive amplius [illegible] subtrahe [illegible] diebus [illegible] usualium mensium [illegible] dies [illegible] coniunctio seu oppositio se [illegible] **Exemplariter** [illegible] in quo coniunctio [illegible] Januarii [illegible] esse [illegible] illa sit [illegible] per precedentem [illegible] oppositionem

5 [illegible] 11 2 [illegible]
0 12 33 10 [illegible] [illegible]
[illegible]
[illegible] prima [illegible]

31

l 10 3 el Tempus a [illegible] ad oppositionem [illegible] ergo est 1l 18 22 7 de aliis quod [illegible] adda precedenti et pervenient mihi [illegible] sequentis oppositionis precedentem scilicet [illegible] februarii 19 l 27 [illegible] de aliis [illegible] adda [illegible] februarii et [illegible] subtrahendo a [illegible] collectum [illegible] dies [illegible] ianuarii scilicet 31 et [illegible] 22 [illegible] de aliis: motus [illegible] motibus addendi sunt per totum annum procedendo.

**Tempus vere coniunctionis aut oppositionis luminarium explorare.** [illegible] precedente habes tempus medie coniunctionis [illegible] medium motum solis et lune simul [illegible] argumentum [illegible] lune. [illegible] itaque primo ad hoc tempus medie coniunctionis aut oppositionis verum locum solis ut [illegible] [illegible]

[illegible]

**In exemplo** [illegible] commostrationis [illegible] anno [illegible] februarii [illegible]

10 3 el medius [illegible] motus solis [illegible] 16 12 argumentum [illegible] 6 22 16 [illegible]

[illegible]

[illegible] [illegible] modo precedente.

**Aspectus lune ad planetas planetarumque ad invicem in almanach colligere.** Aspectus [illegible] certa distancia graduum aut signorum secundum quam planete se [illegible] [illegible] in suis influenciis [illegible] distancia [illegible]

[illegible]

[illegible] quarum debet distancie constituentes aspectum primum ut [illegible]

[illegible] omnes gradus [illegible] ut [illegible] signorum [illegible]

32

Aspectus [illegible]

[illegible]

| | | | |
|---|---|---|---|
| 180 | sexquialtera | 90 | sexquitercia |
| 180 90 | dupla | 120 60 | dupla |
| 90 60 | tripla | | |

Totum [illegible] signorum omnium [illegible] signa. Et post hec una [illegible] nona [illegible] spera celi [illegible] talem [illegible] figuram in circulo equalium laterum et angulorum que quidem latera [illegible] angulos [illegible] totius circuli tales [illegible] competente sunt 180 graduum que [illegible] aspectus 120 per trinum 90 per quarto, et 60 per sextili [illegible] celi [illegible] corpora celestia [illegible] bona [illegible] in almanach [illegible] signorum caracteres secundum ordinem [illegible] in almanach [illegible] luna et [illegible] almanach scribendo quota [illegible] post [illegible] meridiei aut [illegible] in almanach [illegible] post [illegible] similiter et [illegible]

## Latitudinem lune per argumentum latitudinis eius investigare

[illegible] latitudinis lune sua latitudo [illegible] argumentum latitudinis lune [illegible] tabule [illegible] latitudinis lune [illegible] latitudo lune [illegible] septentrionalis [illegible] signa [illegible] ascendens [illegible] meridionalis et descendens [illegible] latitudinem lune [illegible]

**In exemplo** volo invenire latitudinem lune [illegible] 39 [illegible] argumentum latitudinis lune fuit 1 11 20 [illegible] 9 26 [illegible] latitudinis lune invenio latitudinem 3 6 39 [illegible] latitudinem [illegible] 76 [illegible] 2 [illegible] latitudo [illegible] 2 minuta 20 [illegible] latitudinis [illegible] latitudo equata 3 19 19 [illegible] latitudinem et [illegible] argumentum latitu[dinis] [illegible] septentrionalem ascendentem [illegible] latitudinem [illegible] centro et [illegible] argumentum la[titudinis] [illegible]

## Latitudinem trium superiorum accipere

[illegible] latitudo [illegible] superiorum [illegible] Ptolomei [illegible] tabula [illegible] Johannem de Linerijs [illegible] tabula latitudinis [illegible] planete [illegible] in sex [illegible] centri [illegible] 70 gradus [illegible] gradibus [illegible] tabule sub titulo minuta [illegible] acceperis [illegible] 6 [illegible] gradus [illegible] latitudinis planete [illegible] latitudo planete [illegible] latitudo planete [illegible] In exemplo [illegible] latitudinem [illegible] 1 2 [illegible] 82 [illegible] 20 gradus [illegible] 3 1 2 [illegible] 31 1 2 [illegible]

de centro [illegible] adhuc manet 4 [illegible] cum quibus non est intrandum invenio itaque ibi in tabula proportionalia [illegible] que sunt differentiam [illegible] 22 tunc nota addicionem [illegible] in sequenti introitu sunt [illegible]
dividam ergo hanc partem in [illegible] centri et provenit 22 [illegible] quod divido per 6 gradus et tunc
habeo partem proportionalem ad sex gradus et illa erat 3 [illegible] itaque [illegible] minuta plus de
partibus et [illegible] in minuta proportionalia equata [illegible] in parte [illegible] titulo superiori
[illegible] superiori parte tabule michi veneris deinde cum gradibus [illegible] argumenti [illegible] sunt
cum 188 gradibus 32 minutis intrare debeo [illegible] in tabula intrabo cum [illegible]
[illegible] sunt 188 [illegible] quos latitudinem septentrionalem [illegible] minuta sunt
[illegible] superiori parte [illegible] et [illegible] equando [illegible] 11 septe
1 [illegible] multiplicabo ergo eam per minuta proportionalia [illegible] latitudine ad utroque [illegible]
trionalis quoniam eius partes sunt [illegible] dicam illa esse ascendente [illegible]
et ibi maiorem inveniatis latitudinem planete [illegible] utraque tamen sit maior [illegible] minor [illegible]
minorem descendentem [illegible] mediomeridionalis et sequens maior precedente planeta [illegible]
tentrionalis [illegible] aut sunt utraque meridionalis latitudo meridiana sequens decrescit
[illegible] et [illegible] ascendens [illegible] latitudines particulares invenerit

## Latitudinem veneris equare

[illegible] completa forma [illegible] declinacionem [illegible]
accipiende sunt ex quibus finaliter [illegible] declinacionem [illegible] intra cum gradibus
[illegible] et in [illegible] et accipe declinacionem veneris [illegible]
argumenti [illegible] tabula aut [illegible] ad sex gradus ut in precedenti [illegible]
[illegible] per partem proportionalem ad sex gradus [illegible] 60 si tamen [illegible]
deinde centro veneris adde 60 gradus [illegible] 360 [illegible] minuta proportionalia
[illegible] in tabula aut [illegible] et ex opposito [illegible] accipe minuta proportionalia
ea similiter equando per partem proportionalem ad 6 gradus [illegible] duobus inventis multiplica
[illegible] latitudo [illegible] declinacionis [illegible]
an [illegible] sit meridionalis aut septentrionalis [illegible] si tamen [illegible] centro [illegible]
in [illegible] partem tabule intrasti [illegible] meridiana declinacio [illegible] si cum argumento
in aliam partem tabule intrasti [illegible] centro in aliud septentrionalis [illegible] itaque cum
[illegible] titulo ad partem [illegible] reflexionem [illegible] intra [illegible] cum gradibus argumenti
et reflexionem [illegible] deinde a gradibus centri deme 60 gradus
quos [illegible] addideras [illegible] 360 [illegible] et accipe
minuta proportionalia [illegible] equando [illegible] ad partem
quoniam ad [illegible] intra proportionalia [illegible]
[illegible] latitudo reflexionis [illegible] septentrionalis [illegible]
[illegible] centrum [illegible] in partem
superiorem tabule [illegible] argumenti [illegible] 180 gradibus reflexio [illegible] septe
ntrionalis [illegible] 180 [illegible] meridiana esse debet [illegible] si centrum
[illegible] in partem inferiorem argumentum [illegible] 180 meridiana est reflexio [illegible]
[illegible] argumentum [illegible] septentrionalis [illegible] latitudinem [illegible]
cum suo titulo [illegible] minuta proportionalia [illegible]
ad partem [illegible] 6 et erit [illegible] latitudo que [illegible] et [illegible]
veneris [illegible] septentrionalis [illegible] finaliter [illegible] latitudines [illegible] titulo
[illegible] et inventa [illegible] latitudo [illegible] si vero essent [illegible] adde [illegible]
[illegible] que sunt [illegible] minorem [illegible] maiori subtrahe [illegible]
[illegible] erat latitudo [illegible]

## Exemplum

[illegible] opus [illegible] 26 9 22
[illegible] ad [illegible] argumentum veneris [illegible]
[illegible] declinacionem veneris [illegible] gradus [illegible] sunt 210 [illegible]
quos [illegible] in declinacionem [illegible] latitudine declinacionis
[illegible] in centro addendo [illegible] 60 gradus [illegible] proportionalibus intrare oportet [illegible]
[illegible] intermedia [illegible] argumento [illegible] 26 [illegible] 22 per quibus [illegible]
[illegible] posita [illegible] 210 gradus sunt 1 [illegible] veneris
equando [illegible] partem proportionalem deinde cum gradibus centri intro 208 [illegible] minuta
[illegible] ex parte [illegible] sunt 208 gradus accipio minuta propor
tionalia [illegible] deinde [illegible] accipiendo partem proportionalem [illegible]
invenio partem proportionalem 2 [illegible] quam subtraham [illegible] in sequenti introitu [illegible]
[illegible] invenio minuta proportionalia equata [illegible] 31 [illegible] partem [illegible]
[illegible] multiplicabo reflexionem [illegible] sunt [illegible] 1 [illegible] et provenit michi [illegible] latitudo [illegible]
titudo reflexionis [illegible] septentrionalis [illegible] septentrionalis [illegible]
cecidit in [illegible] parte tabule et argumentum est plus 180 gradibus pono ergo [illegible]

latitudine ad partem cui titulo septentrionalis et habenda bona latitudine tertia que declinationis divide illa minuta proportionalia servata per 60 fiet 1 21 et in quociente veniunt mihi 8 17 que sunt latitudo tertia scilicet declinationis. Hic autem declinatio in venere semper est septentrionalis et cum prima latitudine nihil sit, habes duas scilicet secundam et tertiam cum sunt eiusdem partis simul iunge et erit hec latitudo veneris ad decimam Ianuarii per omnibus equata et septentrionalis scilicet 1 11 9

36

# Latitudinem mercurii perscrutari

Quemadmodum in venere sic in mercurio tres latitudines sunt invenienda particulares. Et prima que declinatio dicitur tabule ingrediens intra cum vero argumenti gradus mercurii in lineas numeri et quod oppositum eorum declinationis mercurii invenies cape et equa pro residuo cum quo non est intrandum per partem proportionalem ad sex gradus deinde vero centro mercurii adde 216 gradus abiciendo 360 si tot ad tantum convenerint et ingrediendo accipe minuta proportionalia equando ea per partem proportionalem sicut in superiori dictum est ad 6 gradus multiplica itaque declinationem primo inventam per hec minuta et habebis primam latitudinem que declinatio vocatur. Et si tabule argumenti et centrum cum quo reperisti minuta proportionalia in eandem partem cadat tabule declinationis inventa est mediante [illegible] septentrionalis erit, pone eam ad partem cum suis denominationibus. Pro reflexione iterum invenienda cum gradibus argumenti iterum tabulam intra et reperi reflexionem mercurii eamque sicut precedentes equa si oportet. Item centro mercurii simpliciter centum 80 gradus adde et cum his minuta proportionalia accipe et ipsa equa sua itaque equata ad partem quoniam ex eis tertia latitudo reperienda erit, multiplica itaque reflexionem inventam per minuta proportionalia et quod post multiplicationem provenerit erit secunda latitudo equata que reflexio dicitur. Itaque cuius partis sit patet considerato centro cum quo hec minuta reperisti cadat ad partem superiorem tabule argumenti vel inferius 180 gradibus erit reflexio inventa septentrionalis dicto argumento esset plus meridiana dici debet. Quando autem centrum ad quo proportionalia minuta accepi si esset de inferiori parte tabule et argumentum minus 180 gradibus meridiana esset, si plus septentrionalis adiudicetur, pone ergo etiam reflexionem cum suis denominationibus ad partem. Et tandem pro declinatione habenda accipe dictum minutum proportionalium in altero loco servatum quartam partem et divide quarte hoc est divide illa minuta per 60 et in quociente veniet quarta pars, [illegible] quarte partis [illegible] medietate, adde, et erit tertia latitudo inventa que in mercurio semper est meridiana. Postea istas tres latitudines collige sicut in venere dictum est et erit latitudo finalis inventa in anno eodem per decima Ianuarii verum argumentum mercurii est 1 10 72 centrum vero 81 38 intrando tabulam gradibus argumenti invenio declinationem equatam 0 76 36 cum centro vero addendo ei plus 210 gradus fiet cum 3 71 38 extraho minuta proportionalia 79 12 equata per que minuta dum multiplicatur declinationem primo inventam erit mihi declinationis que prima latitudo est mercurii 0 77 10 equata septentrionalis eo quod centrum cecidit in partem superiorem tabule et argumentum est minus 180 gradibus servabo hanc latitudinem cum suis denominationibus. Deinde pro reflexione habenda intro iterum gradus argumenti et extraho reflexionem equatam 2 29 28 addendo deinde centro simplici 180 gradus quod tunc erit 261 38 invenio minuta proportionalia 8 76 et eas fiet servando in altero loco per ipsa multiplicabo reflexionem primo inventam et fuerit mihi reflexio 0 22 17 meridionalis. Ideo quia centrum cum quo invenio partem minuta cecidit in parte inferiori tabule argumento minus habente 180 gradibus pona ergo hanc latitudinem cum ad precedentem cum suis titulo pro declinatione habenda accipe illa minuta servata in altero loco scilicet 8 76 et ipsa divide per 60 et in quociente venient 2 12 ystis adhuc adda eorum medietatem et erit hec declinatio 3 21 meridiana semper in mercurio que est eius tertia latitudo et cum due latitudines iste scilicet 2a et 3a sunt eiusdem partis scilicet meridiane iunge eas invicem. Et tandem de septentrionali eo quod sit maior istis collectis subtraham provenit ergo mihi vera latitudo mercurii ad tempus predictum septentrionalis scilicet 0 30 12

31

# Tempus quo sol intrat primum minutum arietis aut alterius cuiuscumque signi invenire

Aspice in almanach illius anni in quo intendis quo die sol est in primo signi illius in cuius introitu tempus sic desideras et pro die immediate illum precedente inveniet verum motum solis tunc vigesimam que de tot signis subtrahe quot precedunt illud signum in quod queris introitum, ut si vis in ariete subtrahe de 12 signis, si in tauro subtrahe de tribus, si in libra de sex, et sic de aliis. Sic enim [illegible] longitudo sua qua sol distat a primo minuto illius signi. Deinde cum argumento solis tabula veri motus solis et lune in una hora ingrede et minutum [illegible] gra-dus et signi tabella soli [illegible] accipe motum solis in una hora. Et post [illegible]

longitudine delata divide sic eam in quociente extrahes horas et minuta infra quas post meridiem illius diei per quo verum locum solis inveneras. Sol erat in primo minuto illius signi. Laudo si certificari velis quere verum locum solis ad hoc totum tempus sicut ad diem horas et minuta et invenies optime. In exemplo volo anno domini 1482 scire invenire tempus quo sol intrat primum minutum arietis et video quod sol undecima die Marcii in 29 gradu piscium [illegible] arietis 10 queram verum motum solis ad decimam Marcii quod invenio 11 29 6 7 28 hunc ergo subtraham de duodecim signis et residuabit michi ista longitudo per qua sol distat a primo arietis scilicet [illegible] deinde cum [illegible] argumento solis quod est 8 27 31 20 19 tabulam veri motus solis in hora una ingrediendo invenio verum motum solis in una hora 2 28 per hunc itaque motum divida illam longitudinem et pro primo quociente venit in hoc 21 pro secundo 72 minuta. Erat ergo tempus introitus solis in arietem 10 die Marcii hora 21 minuto 72 post meridiem. Modo alio operaberis pro ceteris signis.

38

## Duodecim celi domos horizontales pro quotacumque hora scire

duodecim domus presupono hic esse querendas iuxta doctrinam communem quam secuti Johannes de [illegible] et alii [illegible] per tabulas illas allemanicas quod respectu gradus in unoquoque 12 signorum habent horas meridiei et alias horalogii cum sex domibus scilicet [illegible] 2 3 4 5 et 6. Si itaque habueris tempus in dictis horis et minutis a meridie computatum scribe illud. Scribe eciam verum motum solis signum est ad meridiem illius diei deinde cum gradu solis tabellas predictas ingredere et horas cum minutis [illegible] gradu solis invenies sub titulo hore meridiei accipe. Scribe sub horis et minutis pro tempore de dicta [illegible] has horas et minuta quas recepisti et sequentes [illegible] parte precedentes [illegible] residuum de vero loco solis ad 60 minuta et eam adde [illegible]. Junge itaque [illegible] horas et minuta illas que prius scripsisti resecando 24 si sint resecanda hore et adiectum residuum aut que sunt querens in horas et minuta sub titulo hore horalogii ubicumque invenias eas aut propinquiores illis ille habebis statim ascendentem gradum pro illo tempore pro te [illegible] similiter 12 et ceteras [illegible] domorum [illegible] quare relinque [illegible] hanc per nadir. Si autem habes horas ab ortu solis computatas adde cum solis [illegible] in [illegible] accipe horas et minuta sub titulo hore horalogii et equando eas per [illegible] tuis [illegible] adde totum collecto quod si maius sit 24 [illegible] horas horalogii per quantum [illegible] aut [illegible] invenies [illegible] oppositum ad quod desideras [illegible] competens. Non opus erat exemplo tam [illegible] facile. Hec [illegible] nihil in se continet quod [illegible] probabilis [illegible] frequentissime demonstrata de duodecim igitur domibus celi pauca desiderans [illegible] libenter impono [illegible] itaque [illegible] tabula exemplis tabularum [illegible] post hanc 38 [illegible]

Item anno domini 1[illegible] Wladislaus rex polonie feria secunda post [illegible] apostoli [illegible] auctoritate universale studium Cracoviensis fundavit [illegible] in [illegible]

Item anno [illegible] collegium [illegible] civitatis [illegible] feria [illegible] post [illegible] anno [illegible] consummatum

Item anno 1[illegible] 2 dominica die post [illegible] proximo hora [illegible] noctis [illegible] tota domus collegii [illegible] in [illegible] nova [illegible] domi [illegible] incipiendo a [illegible] civitatis [illegible] in [illegible] ad [illegible] dictas [illegible] Cracoviensis [illegible] a [illegible] lapidea domus [illegible] a [illegible] domibus [illegible] sancte Anne [illegible] domus plebani [illegible] [illegible] 40 singula singulis [illegible] homines [illegible] et damnum [illegible] predicta [illegible] in [illegible] illius [illegible] per [illegible]

Item anno eodem [illegible] Kazimirus rex polonie [illegible] septima [illegible] anno [illegible] 1492

Item [illegible] illustrissimus [illegible] Johannes Albertus [illegible] in [illegible] anno [illegible] Stephanus hungarie gubernator [illegible] in Cracoviam venit

[illegible]

Tabula ad inveniendum [illegible]

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0 | 2 | 30 | 1 | 0 | 2 | 30 | 31 | 1 | 17 | 30 |
| 2 | 2 | 0 | 5 | 0 | 2 | 0 | 5 | 0 | 32 | 1 | 20 | 0 |
| 3 | 3 | 0 | 7 | 30 | 3 | 0 | 7 | 30 | 33 | 1 | 22 | 30 |
| 4 | 4 | 0 | 10 | 0 | 4 | 0 | 10 | 0 | 34 | 1 | 25 | 0 |
| 5 | 5 | 0 | 12 | 30 | 5 | 0 | 12 | 30 | 35 | 1 | 27 | 30 |
| 6 | 6 | 0 | 15 | 0 | 6 | 0 | 15 | 0 | 36 | 1 | 30 | 0 |
| 7 | 7 | 0 | 17 | 30 | 7 | 0 | 17 | 30 | 37 | 1 | 32 | 30 |
| 8 | 8 | 0 | 20 | 0 | 8 | 0 | 20 | 0 | 38 | 1 | 35 | 0 |
| 9 | 9 | 0 | 22 | 30 | 9 | 0 | 22 | 30 | 39 | 1 | 37 | 30 |
| 10 | 10 | 0 | 25 | 0 | 10 | 0 | 25 | 0 | 40 | 1 | 40 | 0 |
| 11 | 11 | 0 | 27 | 30 | 11 | 0 | 27 | 30 | 41 | 1 | 42 | 30 |
| 12 | 12 | 0 | 30 | 0 | 12 | 0 | 30 | 0 | 42 | 1 | 45 | 0 |
| 13 | 13 | 0 | 32 | 30 | 13 | 0 | 32 | 30 | 43 | 1 | 47 | 30 |
| 14 | 14 | 0 | 35 | 0 | 14 | 0 | 35 | 0 | 44 | 1 | 50 | 0 |
| 15 | 15 | 0 | 37 | 30 | 15 | 0 | 37 | 30 | 45 | 1 | 52 | 30 |
| 16 | 16 | 0 | 40 | 0 | 16 | 0 | 40 | 0 | 46 | 1 | 55 | 0 |
| 17 | 17 | 0 | 42 | 30 | 17 | 0 | 42 | 30 | 47 | 1 | 57 | 30 |
| 18 | 18 | 0 | 45 | 0 | 18 | 0 | 45 | 0 | 48 | 2 | 0 | 0 |
| 19 | 19 | 0 | 47 | 30 | 19 | 0 | 47 | 30 | 49 | 2 | 2 | 30 |
| 20 | 20 | 0 | 50 | 0 | 20 | 0 | 50 | 0 | 50 | 2 | 5 | 0 |
| 21 | 21 | 0 | 52 | 30 | 21 | 0 | 52 | 30 | 51 | 2 | 7 | 30 |
| 22 | 22 | 0 | 55 | 0 | 22 | 0 | 55 | 0 | 52 | 2 | 10 | 0 |
| 23 | 23 | 0 | 57 | 30 | 23 | 0 | 57 | 30 | 53 | 2 | 12 | 30 |
| 24 | 24 | 0 | 0 | 0 | 24 | 1 | 0 | 0 | 54 | 2 | 15 | 0 |
| 25 | 0 | 0 | 0 | 30 | 25 | 1 | 2 | 30 | 55 | 2 | 17 | 30 |
| 26 | 0 | 0 | 0 | 0 | 26 | 1 | 5 | 0 | 56 | 2 | 20 | 0 |
| 27 | 0 | 0 | 0 | 30 | 27 | 1 | 7 | 30 | 57 | 2 | 22 | 30 |
| 28 | 0 | 0 | 0 | 0 | 28 | 1 | 10 | 0 | 58 | 2 | 25 | 0 |
| 29 | 0 | 0 | 0 | 30 | 29 | 1 | 12 | 30 | 59 | 2 | 27 | 30 |
| 30 | 0 | 0 | 0 | 0 | 30 | 1 | 15 | 0 | 60 | 2 | 30 | 0 |

Tabula [illegible] horas [illegible]

Tabula ad [illegible]

| | | | | | |
|---|---|---|---|---|---|
| 1 | 0 | 24 | 31 | 12 | 24 |
| 2 | 0 | 48 | 32 | 12 | 48 |
| 3 | 1 | 12 | 33 | 13 | 12 |
| 4 | 1 | 36 | 34 | 13 | 36 |
| 5 | 2 | 0 | 35 | 14 | 0 |
| 6 | 2 | 24 | 36 | 14 | 24 |
| 7 | 2 | 48 | 37 | 14 | 48 |
| 8 | 3 | 12 | 38 | 15 | 12 |
| 9 | 3 | 36 | 39 | [illegible] | 36 |
| 10 | 4 | 0 | 40 | 16 | 0 |
| 11 | 4 | 24 | 41 | 16 | 24 |
| 12 | 4 | 48 | 42 | 16 | 48 |
| 13 | 5 | 12 | 43 | 17 | 12 |
| 14 | 5 | 36 | 44 | 17 | 36 |
| 15 | 6 | 0 | 45 | 18 | 0 |
| 16 | 6 | 24 | 46 | 18 | 24 |
| 17 | 6 | 48 | 47 | 18 | 48 |
| 18 | 7 | 12 | 48 | 19 | 12 |
| 19 | 7 | 36 | 49 | 19 | 36 |
| 20 | 8 | 0 | 50 | 20 | 0 |
| 21 | 8 | 24 | 51 | 20 | 24 |
| 22 | 8 | 48 | 52 | 20 | 48 |
| 23 | 9 | 12 | 53 | 21 | 12 |
| 24 | 9 | 36 | 54 | 21 | 36 |
| 25 | 10 | 0 | 55 | 22 | 0 |
| 26 | 10 | 24 | 56 | 22 | 24 |
| 27 | 10 | 48 | 57 | 22 | 48 |
| 28 | 11 | 12 | 58 | 23 | 12 |
| 29 | 11 | 36 | 59 | 23 | 36 |
| 30 | 12 | 0 | 60 | 24 | 0 |

Elevatio poli Crac[ovie] 50° 3 [illegible]

In die longissimo Cracovie 16 hore 17 minuta [illegible] nox [illegible]
[illegible] diebus [illegible] horarum [illegible] minuta [illegible]
[illegible] subtrahendo [illegible] longissimi diei horas et minuta de 24 horis [illegible] 48 minuta
[illegible] diebus per Cracoviam

ex blanch[ini] [illegible]

| Tabella augis ☉ in mensibus in anno communi ab anno 1477 completo | | | | | | In anno bissextili tabella augis Solis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 |
| Januarius | 2 | 44 | 37 | 36 | 48 | 2 | 44 | 37 | 36 | 48 |
| Februarius | 5 | 13 | 19 | 20 | 2 | 5 | 18 | 37 | 58 | 0 |
| Martius | 7 | 57 | 56 | 57 | 0 | 8 | 3 | 14 | 32 | 48 |
| Aprilis | 10 | 37 | 14 | 46 | 0 | 10 | 42 | 32 | 33 | 48 |
| Maius | 13 | 21 | 53 | 32 | 48 | 13 | 27 | 12 | 10 | 46 |
| Junius | 16 | 1 | 12 | 31 | 48 | 16 | 6 | 31 | 9 | 56 |
| Julius | 18 | 45 | 50 | 8 | 46 | 18 | 51 | 8 | 46 | 42 |
| Augustus | 21 | 30 | 27 | 45 | 40 | 21 | 35 | 46 | 23 | 42 |
| September | 24 | 9 | 46 | 44 | 42 | 24 | 15 | 4 | 22 | 42 |
| October | 26 | 54 | 23 | 51 | 42 | 26 | 59 | 42 | 49 | 40 |
| November | 29 | 33 | 43 | 30 | 42 | 29 | 39 | 1 | 48 | 40 |
| December | 32 | 18 | 20 | 47 | 40 | 32 | 23 | 39 | 34 | 48 |

| In diebus | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| 1 | 0 | 5 | 18 | 37 | 48 |
| 2 | 0 | 10 | 37 | 15 | 36 |
| 3 | 0 | 15 | 55 | 53 | 24 |
| 4 | 0 | 21 | 14 | 31 | 12 |
| 5 | 0 | 26 | 33 | 9 | 0 |
| 6 | 0 | 31 | 51 | 46 | 48 |
| 7 | 0 | 37 | 10 | 24 | 36 |
| 8 | 0 | 42 | 29 | 2 | 24 |
| 9 | 0 | 47 | 47 | 40 | 12 |
| 10 | 0 | 53 | 6 | 18 | 0 |
| 11 | 0 | 58 | 24 | 55 | 48 |
| 12 | 1 | 3 | 43 | 33 | 36 |
| 13 | 1 | 9 | 2 | 11 | 24 |
| 14 | 1 | 14 | 20 | 49 | 12 |
| 15 | 1 | 19 | 39 | 27 | 0 |
| 16 | 1 | 24 | 58 | 4 | 48 |
| 17 | 1 | 30 | 16 | 42 | 36 |
| 18 | 1 | 35 | 35 | 20 | 24 |
| 19 | 1 | 40 | 53 | 58 | 12 |
| 20 | 1 | 46 | 12 | 36 | 0 |
| 21 | 1 | 51 | 31 | 13 | 48 |
| 22 | 1 | 56 | 49 | 51 | 36 |
| 23 | 2 | 2 | 8 | 29 | 24 |
| 24 | 2 | 7 | 27 | 7 | 12 |
| 25 | 2 | 12 | 45 | 45 | 0 |
| 26 | 2 | 18 | 4 | 22 | 48 |
| 27 | 2 | 23 | 23 | 0 | 36 |
| 28 | 2 | 28 | 41 | 38 | 24 |
| 29 | 2 | 34 | 0 | 16 | 12 |
| 30 | 2 | 39 | 18 | 54 | 0 |
| 31 | 2 | 44 | 37 | 36 | 48 |

| In horis | 3 | 4 | 5 | 6 |
|---|---|---|---|---|
| 1 | 0 | 13 | 16 | 35 |
| 2 | 0 | 26 | 33 | 10 |
| 3 | 0 | 39 | 49 | 45 |
| 4 | 0 | 53 | 6 | 20 |
| 5 | 1 | 6 | 22 | 55 |
| 6 | 1 | 19 | 39 | 30 |
| 7 | 1 | 32 | 56 | 5 |
| 8 | 1 | 46 | 12 | 40 |
| 9 | 1 | 59 | 29 | 15 |
| 10 | 2 | 12 | 45 | 50 |
| 11 | 2 | 26 | 2 | 25 |
| 12 | 2 | 39 | 19 | 0 |
| 13 | 2 | 52 | 35 | 35 |
| 14 | 3 | 5 | 52 | 10 |
| 15 | 3 | 19 | 8 | 45 |
| 16 | 3 | 32 | 25 | 20 |
| 17 | 3 | 45 | 41 | 55 |
| 18 | 3 | 58 | 58 | 30 |
| 19 | 4 | 12 | 15 | 5 |
| 20 | 4 | 25 | 31 | 40 |
| 21 | 4 | 38 | 48 | 15 |
| 22 | 4 | 52 | 4 | 50 |
| 23 | 5 | 5 | 21 | 25 |
| 24 | 5 | 18 | 38 | 0 |

| 2 | 3 | 4 | |
|---|---|---|---|
| 32 | 18 | 21 | motus augis in 1 anno ex tabulis blanchini [illegible] |
| | 1 | 27 | motus augis in quolibet [illegible] augis in 1 anno [illegible] augis [illegible] ab anno 1400 [illegible] |

| S | S | m | 2 | 3 | |
|---|---|---|---|---|---|
| 3 | 1 | 0 | 41 | 38 | Radix augis ☉ pro anno 1498 [illegible] |
| 8 | 13 | 9 | 10 | 38 | Radix [illegible] |
| 4 | 33 | 21 | 28 | 30 | [illegible] |
| 4 | 12 | 46 | 44 | 38 | [illegible] |
| 7 | 0 | 42 | 1 | 38 | [illegible] |

[illegible]

Pro generali tabularum motuum planetarum [illegible] intelligentia [illegible] tabule [illegible]

[illegible]

**Canon primus** [illegible]

[illegible]

**Modus autem**

**Canon** [illegible]

[illegible]

motus earumdem in tabula radicum solis motuum invenies et sic de aliis
est intelligendum. Verbi gratia si annum Christi completum in tabula annorum collectorum
non invenies tunc intrabis cum anno qui immediate proximior fuerit annis presentibus
et ea que ex opposito eius anni invenies in signis gradibus et minutis etc. scribe
in tabula. Similiter si annum Christi proximiorem minorem in tabula anno-
rum collectorum inveneris subtrahe ab annis tuis Christi completis et quot post
illam subtractionem manebunt erit numerus annorum expansorum qui adhuc supersunt
usque ad annum tuum Christi completum. Quarto in illis respice ex subtractione re-
manente intra tabulam annorum expansorum et que ex opposito eius anni
inveneris accipe et adde ad illa que prius accepisti ex opposito annorum collec-
torum signa scilicet sub signis gradus sub gradibus minuta sub minutis
2a sub 2is 3a sub 3is in quolibet motu planete per se radicum quibus ...
to et ultimo adde ea que accepisti circa annos expansos ad ea que invenisti
circa annos collectos incipiendo a subtiliori fractione ut 3a ad 3a 2a ad 2a
minuta ad minuta gradus ad gradus signa ad signa et operare sicut re-
pertum est. Et quod remanserit in quolibet motu est radix motus illius pla-
nete ad principium anni currentis ad ultimum diem decembris. Exempli gratia
volo invenire radicem motus augmenti et accessionis ad princi-
pium anni Christi currentis 1480 accipio pro eo annum Christi completum scilicet
1479. hic enim completus est primo et ... Quero itaque hunc annum Christi
completum in tabula annorum collectorum sed eum non invenio ... completum
immediate proximiorem elapsum et est 1468 et ex opposito eius invenio 0 signa
10 gradus 41 minuta 1 2a 7 3a. Secundo subtraho annum Christi
proximiorem in tabula annorum collectorum inventum scilicet 1468 ab annis
Christi completis manent 11 ... qui sunt anni medii inter annum
1468 et 1479 completum. Tertio cum illis 11 annis intrabo tabulam anno-
rum expansorum ex ... augmenti et accessionis ... et invenio ex oppo-
sito 11 0 signa 0 gradus 1 minutum 19 2a 31 3a. Quarto ... adde
... incipiendo a fractione subtiliori et
... radix motus augmenti et accessionis ad annum Christi completum
1479 que est ad principium anni 1480 currentis ad ultimum diem decembris
ab incarnatione

| S | G | M | 2a | 3a | |
|---|---|---|---|---|---|
| 0 | 10 | 48 | 36 | 23 | Radix augmenti et accessionis |
| 2 | 14 | 32 | 40 | 49 | Radix motus accessionis et recessionis octave sphere |
| 9 | 18 | 41 | 11 | 16 | Radix augis solis vel Mercurii |
| 1 | 14 | 47 | 41 | 48 | Radix augis lune |
| 11 | 24 | 41 | 29 | 34 | Radix medii ar. lune |
| 1 | 29 | 42 | 22 | 29 | Radix medii ar. la. lune |
| 0 | 18 | 6 | 30 | 34 | Radix capitis draconis |
| 8 | 2 | 32 | 47 | 16 | Radix augis Saturni |
| 8 | 28 | 24 | 12 | 19 | Radix augis Jovis |
| 8 | 17 | 23 | 29 | 11 | Radix augis Martis |
| 2 | 24 | 0 | 0 | 22 | Radix medii ar. Veneris |
| 10 | 8 | 9 | 1 | 3 | Radix medii ar. Mercurii |

## Canon secundus de medio motu cuiuslibet planete

Ad aliquod tempus propositum per premissas tabulas invenire motum cuiuslibet plane-
te medium si scire desideras pro tempore aliquo proposito habeas ad quod me-
dium motum cuiuslibet planete scire optas. Et consideres si illud tempus propositum ...
... completos dies horas minuta 2a 3a ... continent hoc ... tempus ...
... radicem anni eiusdem motus in tabula scribe. Secundo si aliquis mensis
elapsus est ad tabulam mensium cum mense completo intrabis ... cuiuslibet
motus quem queris ... quod fuerit in tabulis scriptum ... intrabis
... in tabulis ... Et quod ibi ex opposito ... invenies
ad radicem adde quolibet ad suum ... ut dictum est in primo canone. Tertio
... si ... habueris ad tabulam eiusdem planete ... intrabis
et quod ex opposito ... invenies ... adde. Quarto ...
si aliquas habueris ad tabulam motus cuiuslibet planete ... intrabis. Et
que ex opposito ... invenies ... adde ...
... horas accepisti. Accipe minuta 2a et 3a ...
... diximus. Et que ex opposito ...
... invenies ... adde ... in toto tempore

[illegible] ... planete [illegible] ...

## Cantela prima

[illegible]

Raro quare in tabulis horarum [illegible] ultra 24 extendit [illegible]

## Cantela 2a

[illegible]

## Cantela 3a

[illegible]

## Exempli gratia

[illegible]

## Canon tercius de radiis angulis ... planete

[illegible]

[illegible] ... e in [illegible]

## Cantela

[illegible]

[illegible] ad diem propositum intrabis Cautela [illegible] opus erit [illegible] introducendi augium [illegible] non est [illegible] quod motus [illegible] nichil nisi augis [illegible] nomine [illegible] motus [illegible]

**Exemplum gratia** volo scire auges planetarum ad diem assumpcionis marie anno domini 1480 [illegible] radices augium [illegible] radices [illegible] sunt hee

| | s | g | m | 2 | 3 | |
|---|---|---|---|---|---|---|
| ♄ | 3 | 1 | 2 | 40 | 10 | Radix aug solis et veneris |
| ♃ | 8 | 13 | 1 | 9 | 10 | Radix augis saturni |
| ♂ | 4 | 23 | 18 | 21 | 10 | Radix augis iovis |
| ☉ | 2 | 18 | 29 | 20 | 10 | Radix augis martis |
| ♀ | 1 | 0 | 18 | 0 | 10 | Radix augis mercurii |

habita [illegible] radice intrabis ad tabulam [illegible] completis ad [illegible] completos et deinde [illegible] et ad motus [illegible] addendo ad radicem [illegible] planete habebis [illegible] augium [illegible] ad diem assumpcionis marie 3 [illegible] 1 [illegible] 3 [illegible] 398 [illegible] tercia

| | s | g | m | 2 | 3 | |
|---|---|---|---|---|---|---|
| ♄ | 3 | 1 | 3 | 11 | 40 | Aux solis ad diem assumpcionis marie |
| ♃ | 8 | 13 | 1 | 30 | 40 | Aux saturni ad diem assumpcionis marie |
| ♂ | 4 | 23 | 18 | 28 | 40 | Aux iovis |
| ☉ | 2 | 18 | 40 | 1 | 40 | Aux martis |
| ♀ | 1 | 0 | 18 | 21 | 40 | Aux mercurii |

## Canon quartus

de argumento solis ad aliquod tempus propositum inveniendo [illegible] solis ad [illegible] propositum [illegible] volueris [illegible] motum solis ad [illegible] propositum [illegible] augem solis ad [illegible] propositum habe [illegible] subtrahe augem solis [illegible] solis [illegible] propositum [illegible] post subtractionem [illegible] argumentum erit solis [illegible] ad [illegible] propositum

## Cautela

[illegible] subtractione [illegible] non possis eo quod [illegible] subtrahi non potest [illegible] subtractio [illegible] non possit [illegible] subtractio [illegible] non potest [illegible] minuta [illegible] subtractio [illegible] subtractionem [illegible] est [illegible] cautela [illegible]

**Exemplum** [illegible] ad diem assumpcionis marie volo scire argumentum solis [illegible] motum solis [illegible] 1 [illegible] 2 [illegible] / 21 m / 21 2 / 30 3 / [illegible] solis ad eundem diem marie assumpcionis [illegible] post subtractionem [illegible] 2 [illegible] 38 [illegible] 398

## Canon quintus de centro lune ad

aliquod tempus propositum inveniendo [illegible] centrum lune [illegible] motum lune [illegible] propositum [illegible] motum solis [illegible] propositum [illegible] motum solis subtrahe [illegible] motu lune [illegible] centrum lune [illegible] post subtractionem [illegible] centrum erit lune [illegible] ad diem assumpcionis marie [illegible] centrum lune [illegible] 11 [illegible] 6 [illegible] / 28 m / 21 2 / 39 3 [illegible] motum solis ad diem assumpcionis marie [illegible] 2 [illegible] 21 2 / 30 3 / [illegible] motum solis [illegible] subtrahe [illegible] motu lune [illegible] 9 3 / [illegible] centrum lune ad diem assumpcionis marie 0 [illegible] / 8 [illegible] 17 m / 8 2 / 18 398

## Canon sextus de argumento planetarum

[illegible] saturni iovis et martis ad [illegible] propositum inveniendo [illegible] argumentum [illegible] planete [illegible] motum solis [illegible] propositum habe [illegible] motum planete [illegible] argumentum [illegible] motum planete [illegible] motu solis subtrahe [illegible] argumentum erit planete ad [illegible] propositum

**Exemplum** ad [illegible] ad diem assumpcionis marie volo scire argumentum saturni [illegible] motum solis [illegible] 4 [illegible] 2 m [illegible] 21 m [illegible] 21 [illegible] 398 / [illegible] motum saturni ad diem assumpcionis marie [illegible] / 8 [illegible] / 11 m / 6 2 / 21 3 / [illegible] motum [illegible] subtrahe [illegible] motu solis subtrahe [illegible] argumentum saturni [illegible] / 22 m [illegible] 30 [illegible] / 6 2 / 23 3 / [illegible] ad diem assumpcionis marie / 9 [illegible] / 14 [illegible] / 14 m / 23 m / 3 / 21 3 / [illegible] ad diem assumpcionis marie / 4 [illegible] 14 [illegible] / 26 m / 23 2 / 21 3 / [illegible] argumentum martis ad diem assumpcionis marie / 2 [illegible] / 30 m [illegible] / 0 [illegible] 10 [illegible] 1 m 398 / [illegible] argumenta vero veneris et mercurii [illegible] per [illegible] tabulas invenies

## Canon septimus

de centro medio [illegible] planetarum ad [illegible] propositum invenienda [illegible] motum planete ad [illegible] propositum [illegible] augem planete ad [illegible] a medio eius motu subtrahe et quod post subtractionem remanserit erit medium centrum planete

**Exempli gratia** ad diem assumpcionis marie volo scire medium centrum saturni [illegible] motum debeo scire [illegible] 8 [illegible] / 11 m / 6 2 / 21 3 / [illegible] debeo eius augem scire [illegible] 8 [illegible] / 13 [illegible] / 1 m / 30 2 / 40 3 / [illegible] debeo subtrahere a medio motu saturni et quod manserit [illegible] centrum saturni [illegible] 11 [illegible] / 21 [illegible] / 9 m / 37 2 / 21 3 [illegible] iovis martis mercurii et veneris

## Canon octavus de motu

[illegible] canonis [illegible] planetarum [illegible] tabulas et [illegible] planetarum [illegible]

-4 · 2 · 21 · 21 · 30 · [illegible] sol
-11 · 6 · 28 · 21 · 39 · [illegible] luna

**Particula prima de modo** corrigendi planete [illegible] [illegible] et de novo [illegible] in annis collectis [illegible] motus planetarum in tabulis collectis descriptis [illegible] volueris [illegible] radix et tabulis alfonsi [illegible] correcta [illegible] addideris motui [illegible] opposito 20 annorum [illegible] [illegible] [illegible] 2a [illegible] si addideris [illegible] opposito 20 annorum [illegible] 2a [illegible] 3e si addideris [illegible] opposito 20 annorum [illegible] motibus [illegible] 2a et [illegible] [illegible] motus [illegible] annis collectis

**Exemplum** [illegible] collectis [illegible] motu solis [illegible] opposito [illegible] 1 s 28 / 9 / 9 g / 18 [illegible] / 26 m / 46 2 / 27 3 / [illegible] si addideris motui solis [illegible] opposito 20 annorum in tabula [illegible] 0 / 0 / 8 m / 28 2 / 49 3 / [illegible] venit motus [illegible] 2a [illegible] annis collectis [illegible] opposito annorum [illegible] 1 s 28 / 9 g / 18 [illegible] / 44 m / 24 2 / 22 3 [illegible]

## Modus corrigendi tabulas motuum in annis collectis

est iste [illegible] [illegible] [illegible] [illegible] subtraxeris motum a maiori [illegible] in [illegible] motus [illegible] opposito 20 annorum [illegible] si [illegible] fuerint tabule correcte [illegible] si non fuerint correcte et male sunt debes [illegible] [illegible] [illegible]

**Exemplum** [illegible] radix [illegible] motus solis in annis collectis [illegible] correcta [illegible] 1 s / 9 g / 18 [illegible] / 26 m / 46 2 / 27 3 [illegible] [illegible] 9 / 9 g / 18 [illegible] / 44 m / 24 2 / 22 3 [illegible] [illegible] [illegible] opposito 20 annorum [illegible] 0 / 0 / 8 m / 28 2 / 49 3 [illegible] [illegible] [illegible] [illegible]

## Particula 2a de correctione et [illegible] tabularum

motuum in annis expansis [illegible] tabulas motuum planetarum in annis expansis [illegible] volueris et de novo facere [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] si addideris [illegible] [illegible] 2a [illegible] 3e si addideris prima [illegible] motui planete [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] **Exemplum** [illegible] [illegible] [illegible] [illegible] [illegible] 11 s / 29 g / 29 [illegible] / 39 2 / 22 3 [illegible] si addideris [illegible] [illegible] 11 g / 29 [illegible] / 10 m / 48 2 / 6 3 [illegible] si addideris prima [illegible] motui solis [illegible] [illegible] 0 / 0 [illegible] / 19 m / 8 2 / 29 3 [illegible] 0 / 0 [illegible] / [illegible] m / 27 2 / 28 3 / [illegible] [illegible] motus solis [illegible] [illegible] in annis expansis [illegible] [illegible] [illegible] [illegible]

## Modus corrigendi tabulas

motuum in annis expansis est iste [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] motus prime [illegible] [illegible] tabule [illegible] [illegible] [illegible] [illegible] [illegible] **Cautela** [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] motus prime [illegible] tabule [illegible] correcte **Exemplum** [illegible] [illegible] tabula annorum expansorum [illegible] motus solis [illegible] opposito [illegible] 11 g / 29 [illegible] / 3 m / 13 2 / 22 3 [illegible] subtraxero [illegible] [illegible] opposito [illegible] 11 g / 29 [illegible] / 10 m / 48 2 / 6 3 [illegible] motus [illegible] prime [illegible] opposito prime [illegible] et sic de aliis motibus [illegible] solis et aliis planetarum [illegible] bisextis [illegible] habendo respectu

## Particula 3a de [illegible] et correctione motuum

in tabulis [illegible] tabulas [illegible] in mensibus [illegible] planetarum [illegible] et de novo facere volueris [illegible] [illegible] prima [illegible] [illegible] tabule in Januario [illegible] [illegible] de tabula [illegible] **Exemplum** prima [illegible] in Januario [illegible] [illegible] motu solis [illegible] 0 / 33 m / 18 2 / 8 3 [illegible] motus [illegible] in tabula [illegible] solis [illegible] opposito 3 [illegible] [illegible] [illegible] [illegible] [illegible] et [illegible] [illegible] ad Januarium [illegible] [illegible] motus [illegible] [illegible] [illegible] [illegible] prima [illegible] Januarii [illegible] [illegible] motui [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] Februarii [illegible] solis addideris motui in Januario [illegible] [illegible] prima [illegible] motui solis [illegible] opposito 28 [illegible] 0 [illegible] 0 [illegible] / 34 m / 43 2 / 9 3 et venit [illegible] Februario [illegible] motus solis [illegible] [illegible] 1 [illegible] / 28 [illegible] / 9 m / 11 2a / 18 3 [illegible] [illegible] aliis [illegible] [illegible] [illegible] [illegible] [illegible] planeta volueris [illegible] [illegible] motus [illegible] **Cautela** [illegible] anno bisextili [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] prima [illegible] Januarii addere [illegible] [illegible] [illegible] [illegible] Februarii 1 g / 29 [illegible] / 8 m / 19 2 / 31 3 [illegible] [illegible] [illegible] in anno bisextili [illegible] [illegible] tabula [illegible] [illegible] planete [illegible] [illegible] addideris [illegible] in tabula [illegible] bisextili anno [illegible] [illegible] opposito Marcii [illegible] [illegible] / [illegible] / 28 [illegible] / 22 m / 29 2 / 26 3 / [illegible] si addideris [illegible] 0 / [illegible] / 49 m / 8 2 / 20 3 / [illegible] [illegible] Marcii in anno bisextili in tabula [illegible] 2 g / 29 [illegible] / [illegible] m / 34 2 / 26 3 [illegible] aliis [illegible] intelligendum

## Particula sexta de computatione et correctione

[illegible] tabulas [illegible] et motibus planetarum computare et de novo facere volueris [illegible] motus unius diei planete [illegible] motum computare volueris [illegible] planete in una hora [illegible] alphonso [illegible] [illegible] addere [illegible] habebis [illegible] in horis **Exemplum** in tabula solis [illegible] diei [illegible] 0 signa 0 gradus 59 minuta / 8 secunda / 20 tertia [illegible] 0 signa / 1 gradus / 58 minuta / 16 secunda / 39 tertia [illegible]

**Modus corrigendi** tabulas dierum et horarum [illegible] tabulas [illegible] planetarum [illegible] subtrahe [illegible] [illegible] tabule [illegible] correcte [illegible] **Exemplum** [illegible] solis [illegible] 0 signa / 1 gradus / 49 minuta / 91 secunda [illegible] 38 tertia [illegible] 0 signa / 4 gradus / 42 minuta / 29 secunda / 48 tertia [illegible] manebit [illegible] 0 signa 0 gradus / 49 minuta / 8 secunda / 28 tertia [illegible] tabularum de mediis motibus planetarum et [illegible] computatio et correctio [illegible] motus planetarum [illegible] medio motus planetarum [illegible] computabit [illegible] almanach [illegible]

## Canon nonus quo medius motus solis lune

et argumenti lune [illegible] computare volueris [illegible] singulos dies [illegible] radice [illegible] planete habe [illegible] computare [illegible] motus [illegible] planete [illegible] unius diei [illegible] radici adde [illegible] habebis motum [illegible] planete ad [illegible] Januarii [illegible] motum [illegible] diei Januarii [illegible] ad [illegible] motui [illegible] diei [illegible] unius diei [illegible] veniet motus [illegible] diei Januarii [illegible] addideris motum unius diei [illegible] ad 31 [illegible] computare [illegible] **Exemplum** ad annum domini 1481 [illegible] computare motum solis [illegible] prima die Januarii [illegible] almanach anni 1481 [illegible] radice [illegible] anni [illegible] 9 signa / 18 gradus / 22 minuta / 46 secunda / 38 tertia [illegible] radice adde [illegible] motum solis in uno die [illegible] 0 signa / 0 gradus / 59 minuta / 8 secunda / 20 tertia [illegible] ad primam Januarii [illegible] 9 signa / 19 gradus / 21 minuta / 54 secunda / 58 tertia [illegible] motum unius diei veniet motus solis ad [illegible] Januarii / 9 signa / 20 gradus / 21 minuta / 17 secunda / 19 tertia [illegible] Januarii [illegible] luna et argumento lune [illegible] die

## Modus corrigendi computationem tuam

[illegible] Januarii [illegible] motum solis lune vel argumenti lune [illegible] motum solis vel lune vel argumenti lune [illegible] Januarii [illegible] radice [illegible] [illegible] radicum lune [illegible] radici [illegible] Januarii [illegible] [illegible] computasti [illegible] motus [illegible] computatione [illegible] correctione [illegible] emenda **Exemplum** [illegible] ad annum domini 1481 [illegible] motus solis medius [illegible] Januarii [illegible] radix [illegible] anni [illegible] 9 signa / 18 gradus / 22 minuta / 46 secunda / 38 tertia [illegible] in tabula [illegible] solis [illegible] Januarii [illegible] 1 signa / 0 gradus / 37 minuta / 18 secunda / 8 tertia [illegible] Januarii [illegible] 10 signa / 19 gradus / 16 minuta [illegible] 42 secunda / 41 tertia

## Consideratio secunda

[illegible] motus [illegible] radice [illegible] computare [illegible] solis lune et argumento lune [illegible]

## Canon decimus pro centro lune per singulos dies

[illegible] anni [illegible] almanach [illegible] computando [illegible] centri lune habe [illegible] radice medii motus solis [illegible] radice solis [illegible] lune ad primam anni [illegible] habe radicem medii motus solis [illegible] subtrahe a radice lune [illegible] post subtractionem [illegible] radice centri lune [illegible] motum centri [illegible] radice centri lune [illegible] adde motum centri [illegible] in una die [illegible] habebis motum centri ad primam Januarii [illegible] diei [illegible] veniet motus centri

[illegible] invenies cum motu centri lune [illegible] dies [illegible] in tabula intitulata motus centri lune [illegible] centri cum [illegible] in canone precedente [illegible] dies [illegible] examinando.

**Exemplum.** [illegible] anno domini 1481 [illegible] volo [illegible] radicem medii motus lune [illegible] radice centri lune [illegible] radice medii motus solis [illegible] 8 m / 46 2 / 52 3 / [illegible] radice medii motus solis subtrahe a radice [illegible] 22 m / 46 2 / 39 3 [illegible] centri lune [illegible] post subtractionem [illegible] radix centri lune [illegible] in tabula dicta centri lune [illegible] veniet centrum lune [illegible] de Januarii [illegible] veniet motus centri lune prima die Ja[nuarii] [illegible] 22 m / 43 2 / 23 3 / [illegible] 93 [illegible]

## Canon undecimus medium motum trium superiorum Saturni Jovis et Martis

[illegible] almanach [illegible] de decem in decem [illegible] Saturni Jovis et Martis [illegible] almanach [illegible] motibus [illegible] medii [illegible] Saturni Jovis et Martis [illegible] Primo radicem [illegible] motus [illegible] in tabula dicta [illegible] planete [illegible] subtrahe et motum [illegible] addita [illegible] motus planete ad 10 diem Januarii [illegible] addita [illegible] motus [illegible] dies [illegible] et ad motum [illegible] veniet motus [illegible] dies [illegible] planete [illegible]

**Exemplum.** [illegible] anno domini 1481 [illegible] Saturni [illegible] de decem in 10 almanach [illegible] 8 [illegible] 8 m [illegible] radice medii motus Saturni [illegible] 20 m / 42 / 47 3 / [illegible] post addicionem [illegible] motus medius Saturni ad 10 diem Januarii [illegible] 8 [illegible] 14 [illegible] 8 m [illegible] motus medius Saturni ad [illegible] Januarii [illegible] 32 2 / 47 3 / [illegible] medius motus Saturni ad [illegible] Januarii [illegible] veniet motus [illegible] 8 [illegible] 14 [illegible] 28 m / 39 2 / 88 3 / [illegible] veniet motus [illegible] 8 [illegible] 14 [illegible] 8 m / 42 [illegible] 31 3 / [illegible] in Jove et Marte

### Cautela prima

[illegible] dies quibus [illegible] 30 [illegible] 31 dies habuerit [illegible] Januarius Marcius [illegible]

### Cautela 2a

[illegible] februarius ad [illegible] dies [illegible] medii motus planete [illegible] 28 dies [illegible] octo diebus [illegible] februarium [illegible] In anno vero bisextili [illegible] februarium [illegible]

## Canon duodecimus argumentum

[illegible] planetarum superiorum ut Saturni Jovis et Martis de decem [illegible] almanach [illegible] argumentum planete superioris [illegible] in 10 almanach [illegible] radicem argumenti [illegible] radicem [illegible] solis [illegible] radicem [illegible] planete [illegible] subtrahe radicem [illegible] radice medii motus solis [illegible] post subtractionem [illegible] radix argumenti planete [illegible] argumenti planete [illegible] medii motus solis [illegible] medii motus planete [illegible] argumenti medii planete [illegible] argumenti planete [illegible] ad radicem argumenti planete [illegible] argumentum planete [illegible] Januarii [illegible] medii motus planete

[illegible] adde [illegible] planete [illegible] ad argumentum planete [illegible]
[illegible] ad decem dierum et habebis ad [illegible] diei argumentum planete
[illegible] et [illegible] Canone precedente
[illegible]

**Exemplum.** [illegible] 1381 [illegible]
[illegible] Saturni de 10 in 10 [illegible] almanach [illegible]
[illegible] 4 s 9 g 18 m 42 2a 39 3a [illegible]
[illegible] Saturni [illegible] 8 s [illegible] 28 2a [illegible] 3a
[illegible] Saturni [illegible] 28 2a [illegible] 3a [illegible] Saturni
10 dierum [illegible] 10 dierum [illegible] 0 s 9 g [illegible]
[illegible] 2a 10 3a [illegible] Saturni 10 dierum [illegible] 0 s 0 g
[illegible] 3a [illegible] Saturni 10 dierum [illegible]
[illegible] 10 dierum [illegible] Saturni [illegible]
[illegible] 0 s 9 g 31 m 11 2a 23 3a [illegible] adde radici argumenti [illegible]
[illegible] et veniet argumentum Saturni 10 die Januarii [illegible]
[illegible] 2a [illegible] 3a [illegible] 10 die Januarii
[illegible] Saturni [illegible]
10 dierum [illegible] Januarii
[illegible] 22 [illegible] 2a 21 3a [illegible]
[illegible] precedenti canone [illegible] februarii [illegible]
[illegible] operare

## Canon 13. Centrum medium planete

[illegible] de 10 dierum [illegible] almanach faciendo [illegible]
medii planete [illegible] decem [illegible] almanach [illegible]
[illegible] faciendo primo radice medii motus centri illius planete [illegible]
[illegible] intendis [illegible] radice medii motus planete

[illegible] radice [illegible] planete [illegible] intendis [illegible]
radice [illegible] planete a radice medii motus [illegible]
[illegible] radix medii [illegible] planete [illegible] intendis [illegible] radice [illegible]
planete adde motum [illegible] 10 [illegible] planete [illegible] 10
die Januarii [illegible] de Januarii [illegible]
[illegible] 10 die Januarii [illegible]
[illegible] manebit centrum planete ad 10 diem Januarii [illegible]
[illegible] motu et argumento planete [illegible]
[illegible] radicem centri planete [illegible] centro [illegible] ad 10
diem Januarii [illegible] planete [illegible]
[illegible] centra media planete [illegible]
[illegible] collocando **Exemplum** [illegible] 1381 [illegible]
[illegible] centrum Saturni [illegible]
[illegible] almanach faciendo primo [illegible] radice medii
centri Saturni [illegible] radicem [illegible] planete
[illegible] intendis [illegible] radice medii motus Saturni [illegible]
[illegible] Saturni [illegible] 8 s [illegible] 17 [illegible]
[illegible] 2a 49 3a [illegible] radice [illegible] Saturni adde motum [illegible]
10 dierum [illegible] 0 [illegible] 41 3a [illegible] Saturni [illegible] 10
die Januarii [illegible] 8 s 17 g [illegible] 2a 49 3a [illegible]
[illegible] motus [illegible] 10 dierum Januarii [illegible] 14 g
8 m 33 2a 41 3a [illegible] veniet centrum Saturni ad decem die Januarii
[illegible] 2 g 6 m 29 2a 47 3a [illegible]
[illegible] medii motus et argumenti Saturni [illegible] radix centri Saturni
[illegible] 26 m 22 2a 49 3a [illegible] centro Saturni [illegible]
[illegible] 2 g 6 m 29 2a 47 3a [illegible] post subtractionem
manebit centrum Saturni 10 dierum [illegible] veniet 0 s 0 g 20 m
[illegible] 2a 48 3a [illegible] centrum Saturni [illegible] centra [illegible]
[illegible] collocando [illegible]
[illegible] Saturni

## Canon quartusdecimus de argumento

[illegible] Veneris et Mercurii [illegible] almanach faciendo
[illegible] argumentum Veneris [illegible]
[illegible] primo radice argumenti
Veneris [illegible] adde argumentum Veneris [illegible] 10 dierum [illegible] tabula Ve-
neris [illegible] veniet argumentum Veneris [illegible] die Januarii [illegible]
argumento Veneris [illegible] argumentum Veneris [illegible]
[illegible] de Januarii [illegible] Januarii [illegible]

**Exemplum** [illegible] 1381 [illegible] argumenta
Veneris [illegible] primo radice argumenti Veneris
[illegible] 2a 33 3a [illegible] radici argumenti Veneris [illegible] adde
motum argumenti Veneris [illegible] 10 dierum in tabula argumenti
Veneris [illegible] 2a [illegible] 3a [illegible] veniet [illegible] 10 g [illegible] m [illegible]
[illegible] 3a [illegible] addo motum argumenti Veneris [illegible] 10 dierum in tabula [illegible]
[illegible] veniet [illegible] argumenti Veneris [illegible] 10 die [illegible] 10 g [illegible] 2a
[illegible] 3a [illegible] argumenta Veneris [illegible]



Margin notes:

plate

4 plate

Radix medii motus Saturni est 8 [illegible] 28 21 48

[illegible] post subtractionem [illegible] radix centri Saturni 0 s [illegible] 20 m [illegible] 2a 49 3a

**Cu vero argumentum mercurii** [illegible] ... operare ... tabula argumentorum ... mercurii ... de januarii ... **Exemplum** anno domini 1481 ... argumentum mercurii ... almanach ... [illegible]

**Canon iij de vero motu** [illegible] ... veneris ... almanach ... [illegible]

... **Exemplum** ... anno domini 1481 ... [illegible]

**In mercurio sic operandum est** [illegible] ... almanach ... **Exemplum** anno domini 1481 ... [illegible]

## Canon 10 de equali[bus] intabulas equationum planetarum

[illegible]

**Com[m]enta**

[illegible]

**Consideratio prima**

[illegible]

**Consideratio 2a**

[illegible]

**Consideratio 3a**

[illegible]

## Canon 11 de auge cum inveniend[a]

[illegible]

[illegible]

## Radices augium ad tempus nativitatis Christi

| s | g | m | 2 | 3 | |
|---|---|---|---|---|---|
| 2 | 11 | 24 | 23 | l | Sol et Ve[nus] |
| 1 | 23 | 23 | l2 | l | Saturni |
| 4 | 3 | 31 | 0 | l | Iovis |
| 3 | 24 | 12 | 13 | l | Martis |
| 6 | 10 | 39 | 33 | l | Mercurii |

[illegible]

## Canon 18 de vero motu inveniendo

[illegible]

## Canon 19 de vero loco lune inveniendo

[illegible]

Cautela prima [illegible]

[illegible] minuta proportionalia [illegible] in minutis nihil inveniuntur [illegible] proportionalium [illegible] equata [illegible] **Cautela**

2a [illegible] minuta proportionalia [illegible] nihil [illegible] diversitas diametri [illegible] **Exemplum** [illegible] 1486 currentem [illegible] · 20 · 38 · 21 · 9 · 37 [illegible] argumentum lune [illegible] 1 · 11 · 23 · 8 · 23 [illegible] centrum lune [illegible] 23 · 3 · 26 · 48 · 3 [illegible] tabula equationis lune [illegible] equationem centri lune [illegible] 10 · [illegible] titulo [illegible] 10 [illegible] titulo [illegible] minuta proportionalia [illegible] 0 · m 31 · 2 · 40 · 3 [illegible] ab equatione centri [illegible] 10 [illegible] 22 · 2 · 40 · 3 [illegible] titulo [illegible] argumentum lune [illegible] 18 · 37 · [illegible] 16 [illegible] centro lune [illegible] minuta proportionalia [illegible] minuta proportionalia [illegible] **Ad** [illegible] argumento [illegible] tabulam equationis lune [illegible] equationem argumenti lune [illegible] titulo [illegible] proportionalia [illegible] ab equatione argumenti [illegible] titulo [illegible] **Octavo** [illegible] diversitas diametri [illegible] proportionalia [illegible] diversitas diametri [illegible] titulo [illegible] proportionale est [illegible] diversitas diametri [illegible] minuta proportionalia [illegible] [illegible]

## Canon 20 de vero loco capitis draconis inveniendo

[illegible] verum motum capitis draconis [illegible] medium motum capitis draconis [illegible] verum motum capitis [illegible] minuta 20 [illegible] verum motum capitis draconis [illegible] 1486 currente [illegible] medium motum capitis [illegible] · 11 · 3 · 42 · 14 · 11 · 30 [illegible] minuta [illegible]

## Canon 21 de argumento latitudinis lune inveniendo

[illegible] argumentum latitudinis lune [illegible] verum locum lune [illegible] verum locum capitis draconis [illegible] **Exemplum** [illegible] 1486 [illegible] · 11 · 1 · 49 · [illegible] verum motum capitis draconis [illegible] · 11 · 30 · 42 · 14 · 11 · 30 [illegible] argumentum latitudinis [illegible] · 11 · 28 · 6 · 29 · 32

## Canon 22 de vero loco Jovis Saturni Martis inveniendo

[illegible] verum locum Saturni Jovis [illegible] medium motum [illegible] centrum [illegible] planete [illegible] medium motum planete [illegible] medius motus [illegible] centrum planete [illegible] tabula [illegible] planete [illegible] centri [illegible] minuta proportionalia [illegible] titulo [illegible] **Exemplum** [illegible] proportionalium [illegible] [illegible] centro medio [illegible] planeta [illegible] **Octavo** [illegible] equatione centri [illegible] medio centro [illegible] centri [illegible] argumento [illegible] planete [illegible] **Nono** [illegible] minuta proportionalia [illegible] titulo [illegible] tabula [illegible] equationem [illegible] argumenti [illegible] diversitas diametri [illegible] minuta proportionalia [illegible] longior [illegible] diversitas diametri [illegible] longior [illegible]

[illegible]
[illegible]

[illegible] dyametri et minuta proporcionalia [illegible] partem proporcionalem [illegible] addere [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] 1 286 [illegible] 3 . 10 . 11 . 6 . [illegible]

11 . 1 . 30 [illegible] 11 . 21 . 9 . 34 . 41 . [illegible]

[illegible] 8 22 30 [illegible]

[illegible] 20 [illegible] 41 . 2 / 36 [illegible] 19 [illegible] 22 / 28 [illegible]

11 . 21 . 28 . 38 . 21 [illegible] 8 22 11 38 19 [illegible]

[illegible] 6 . [illegible] 20 [illegible]

[illegible] 19 [illegible] 41 . 2 . 36 [illegible] 8 . 8 . 31 . 9 . 11 . 9

## Canon 23 de vero motu veneris et mercurii inveniendo

[illegible]

**Cautela prima** [illegible]

**Cautela 2a** [illegible] 30 [illegible]

**Cautela 3a** [illegible]

**Cautela 4a** [illegible]

**Cautela 5a** [illegible] 12 [illegible] 30 [illegible] 11 . 4 . 29 [illegible]

**Canon 24** [illegible]

[illegible]

## Cano 24 q(uod) planeta sit ascendens vel descendens

[illegible]

## Canon 26 de continuatione verorum motuum planetarum in almanach reponendo

[illegible]

**Cantela prima** [illegible]

**Cantela 2a** [illegible]

**Cantela 3a** [illegible]

**De ratione** [illegible]

-10-

[illegible]

## Canon 27 de vero motu capitis draconis lune in almanach reponendo.

[illegible]

[illegible] 2a [illegible]

Canon 28 de coniunctionibus et oppositionibus mediis pro annis calculando

[illegible] 2a [illegible]

Cautela prima

Cautela 2a

Canon 29 quo alie coniunctiones et oppositiones medie pro annis [illegible]

[illegible]

Cautela prima

[illegible]

Cautela 2a [illegible]

[illegible] Cautela 2a [illegible]

[illegible]

Canon 20 de mediis coniunctionis et oppositionis solis et lune [illegible]

[illegible] Cautela secunda [illegible]

[illegible] Canon 21 [illegible]

[illegible]

ad minuta et veniunt 16 m / 23 2. [illegible] eandem medietatem reductam ad minuta adde [illegible] et [illegible] horarum [illegible] 29 / 18 m 39 2 / 41 3 [illegible] ad [illegible] horarum quia motus [illegible] una hora [illegible] tabula [illegible] 30 m / 41 2 / [illegible] 30 m 50 2 [illegible] una hora [illegible] 41 2 / 31 3 [illegible] una hora et veniunt 2 m 32 2a [illegible] una hora [illegible] ad 2a et veniunt 16 4 2 [illegible] 22 2 / 31 3 [illegible] ad 2a [illegible] 8 14 [illegible] per 60 [illegible] 29 minuta [illegible] 1 0 2 [illegible] per 60 [illegible] 29 2 [illegible] 41 0 [illegible] 19 / 29 m / 27 2 [illegible] 22 dies 11 h / 26 m 41 2 [illegible]

## Canon 32 ad gradum ascendentem et alias domus celi inveniendas

[illegible] ascendentem ad [illegible] coniunctionis vel oppositionis vel alicuius [illegible] ad inveniendum volueris [illegible] hore horologii [illegible] intra tabulam [illegible] 60 [illegible] minuta [illegible] [illegible] Canon [illegible] tabula [illegible] 11 ho. [illegible] 17 [illegible] 26 m / 41 2 [illegible] 28 m / 41 2 [illegible] 21 libre [illegible] 18 h 28 m [illegible] 12 domus [illegible]

**Cautela** [illegible] canone [illegible] 22 horae

## Canon 33 de reducendo coniunctiones et oppositiones

[illegible] horas horologii [illegible] coniunctionis vel oppositionis [illegible] volueris ad horas horologii [illegible] tabula [illegible] ascendentis [illegible] canone [illegible] 11 2 [illegible] 0 29 [illegible]

**Cautela.** [illegible] **In horologio atthesis** [illegible] hora [illegible] 12 [illegible] [illegible] 18 [illegible] 22 die Januar [illegible] 11 h / 26 m / 41 2 [illegible] 19 / 21 m [illegible] 29 m / 14 2 [illegible] 21 libre [illegible] domibus [illegible] canone precedenti

## Canon 34 de introitu solis in arietem et de [illegible] celi [illegible]

[illegible]

[illegible]

Cautela

[illegible]

[illegible]

Canon 34 de conuersione aliorum quorum planetarum

[illegible]

Cautela

[illegible]

[illegible]

Canon 30. de radicibus ad quemque alium meridianum

[illegible] ... tabulas ... ad alium meridianum ... [illegible]

[illegible]

Est et aliter modus querendi radices [illegible]

[illegible]

[illegible]

## Canon 37 de latitudine lune invenienda

Cum latitudinem lune invenire volueris [illegible] argumentum latitudinis [illegible] capitis draconis [illegible] latitudinis lune [illegible]

[illegible]

Via [illegible]

[illegible]

## Canon 38 de latitudine trium superiorum ut Saturni Jovis et Martis

Cum latitudinem trium superiorum invenire volueris [illegible]

[illegible]

Cautela prima [illegible]

Cautela 2a [illegible]

[illegible]

ad primum [illegible] ... lati° septentrionalis

## Canon 29 de latitudine veneris inveniendo

Cum latitudine veneris [illegible] ... declinatio, 2a reflectio, 3a deviatio ... [illegible]

## Cautela prima

[illegible]

## Cautela 2a

[illegible] ... Verbi gratia

## Latitudine veneris que reflectio dicitur sic invenies

[illegible]

## Cautela prima

[illegible]

## Cautela 2a

[illegible] ... Meridionalis

## Latitudinem veneris que dicitur ... invenire

[illegible]

## Canon 30 et ultimus de latitudine Mercurii invenienda

[illegible]

**Cautela** [illegible]

## Latitudinem Mercurii reflexionis invenire

[illegible]

**Cautela** [illegible]

**Cautela** [illegible]

## Latitudinem Mercurii que declinatio dicitur invenire

[illegible]

ffinis presentis canonum exemplaris super tabulas
resolutas ad meridianum Cracoviensem latinis que supra

motus [illegible] | [illegible]

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 8 | 9 | 10 | 2 | 3 | 8 | 9 | 10 | 2 3 |
| 25 | 51 | 29 | ♊ | ♊ | | 6 | 15 | 23 | 38 | 9 | 3 | 2 | 43 | 15 47 |
| 34 | 35 | 56 | ☌ | sequitur | | 6 | 28 | 41 | 31 | 49 | 3 | 7 | 30 | 25 7 |
| 41 | 58 | 24 | ♊ | ☌ | | 9 | 25 | ~~14~~ 22 | ~~41~~ 6 | ~~15~~ 44 | 6 | 1 | 7 | 44 9 |
| 48 | 37 | 36 | ☍ | sequitur | | 10 | 10 | 0 | 58 | 17 | 6 | 17 | 47 | 13 30 |
| 25 | 53 | 6 | 34 | ♊ | | ♊ | 1 | 4 | 26 | 25 39 | 9 | 11 | 37 | 50 21 |
| 11 | 1 | 55 | 53 | 43 | | sequitur | 1 | 14 | 31 | 16 33 | 9 | 16 | 33 | 52 1 |
| 11 | 9 | 47 | 2 | 20 | ♊ | ☍ | 4 | 11 | 25 | 45 38 | 0 | 14 | 56 | 43 0 |
| 11 | 14 | 55 | 23 | 50 ☍ | | sequitur | 4 | 23 | 22 | 31 0 | 1 | 4 | 36 | 29 48 |
| | | | | | | ♊ | 7 | 21 | 20 | 54 58 | | | | |
| | | | | | | sequitur | 8 | 5 | 6 | 32 2 | | | | |
| | | | | | | ☌ | 10 | 19 | 0 | 18 31 | 6 | 18 | 7 | 22 31 |
| | | | | | | sequitur | 11 | 3 | 29 | 44 54 | 7 | 4 | 45 | 42 30 |
| | | | | | | ♊ | 2 | 8 | 5 | 13 35 | 10 | 9 | 33 | 40 58 |
| | | | | | | sequitur | 2 | 20 | 50 | 30 45 | 10 | 12 | 38 | 54 11 |
| | | | | | | ☍ | 5 | 12 | 21 | 50 55 | 1 | 21 | 35 | 41 59 |
| | | | | | | sequitur | 5 | 26 | 45 | 50 19 | 2 | 8 | 13 | 1 58 |
| | | | | | | ♊ | 8 | 18 | 24 | 32 43 | 4 | 24 | 5 | 26 12 |
| | | | | | | sequitur | 8 | 29 | 12 | 11 48 | 4 | 28 | 52 | 19 47 |
| | | | | | | ☌ | 11 | 26 | 42 | 40 45 | 7 | 21 | 44 | 21 31 |
| | | | | | | sequitur | 0 | 10 | 29 | 25 44 | 8 | 8 | 24 | 41 29 |
| | | | | | | ♊ | 2 | 27 | 44 | 48 12 | 11 | 2 | 53 | 22 54 |
| | | | | | | sequitur | 3 | 10 | 35 | 12 39 | 11 | 7 | 56 | 44 47 |
| | | | | | | ☍ | 6 | 5 | 48 | 3 57 | 2 | 8 | 53 | 21 1 |
| | | | | | | sequitur | 6 | 18 | 30 | 58 9 | 2 | 25 | 13 | 40 59 |

viii